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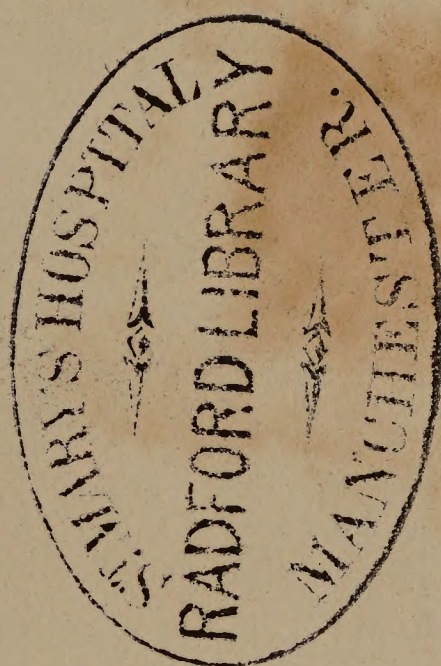
















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THE DUBLIN  
QUARTERLY JOURNAL

MEDICAL SCIENCE;

CONTAINING

ORIGINAL COMMUNICATIONS,

REVIEWS, RETROSPECTS, AND REPORTS

OF THE

LATEST DISCOVERIES IN MEDICINE, SURGERY, AND THE COLLAGES OF THE ARTS

VOL. XI

FEBRUARY AND MAY, 1831

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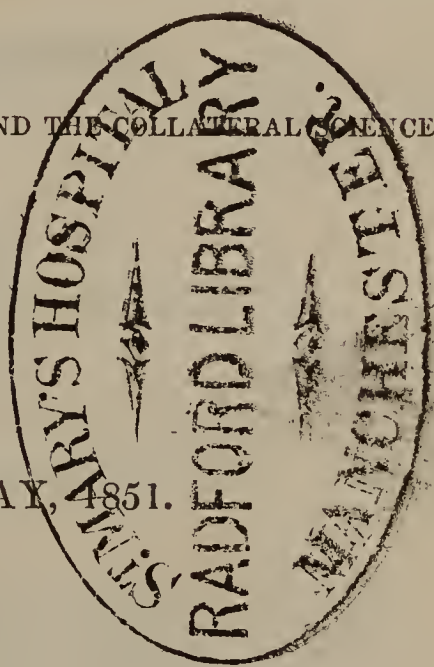
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### BOOKS AND PERIODICALS RECEIVED.

1. A Manual of Qualitative Analysis. By Robert Galloway, F. C. S., &c. London: Churchill, 1850. 12mo. pp. 119.
2. Remarks on Insanity, its Nature and Treatment. By Henry Monro, M. B., F. C. P. In two Parts. London: Churchill, 1850. Part I. 8vo. pp. 75.
3. On the Identity or Non-Identity of Typhoid and Typhus Fevers. By W. Jenner, M. D., &c. London: Churchill, 1850. 8vo. pp. 102.
4. Lectures on Clinical Medicine. By John Hughes Bennett, M. D., &c. Edinburgh: Sutherland and Knox, 1850. 8vo. Nos. 1, 2, and 3. pp. 136.
5. Observations on the Treatment of Phthisis Pulmonalis. By John Hughes Bennett, M. D., &c. Edinburgh: Sutherland and Knox, 1850. 8vo. pp. 24.
6. Address to a Medical Student. Second Edition. Oxford: Parker; London: Churchill, 1850. 16mo. pp. 167.
7. General Pathology, as conducive to the Establishment of rational Principles for the Diagnosis and Treatment of Disease. A Course of Lectures delivered at St. Thomas' Hospital during the Summer Session of 1850. By John Simon, F. R. S., &c. London: Renshaw, 1850. 12mo. pp. 288.
8. On the Identity or Non-Identity of the specific Cause of Typhoid, Typhus, and Relapsing Fever. By William Jenner, M. D. (From the Medico-Chirurgical Transactions, Vol. XXXIII.) London, 1850. Pamphlet, pp. 20, with a coloured Plate.
9. The Profession of Medicine, its Study and Practice, its Duties and Rewards. An Address, delivered at St. Bartholomew's Hospital, on the Opening of the Medical Session of 1850-51. By Charles West, M. D., &c. London: Longmans, 1850. Pamphlet, pp. 32.



10. Medico-Chirurgical Transactions. Published by the Royal Medical and Chirurgical Society of London. Vol. XXXIII. London: Longmans, 1850. pp. 360.

11. Report of the Proceedings of the Pathological Society of London. Fourth Session, 1849-50. 8vo. pp. 152.

12. On Fatty Diseases of the Heart. By Richard Quain, M. D., Assistant Physician to the Hospital for Consumption and Diseases of the Chest. (From the Medico-Chirurgical Transactions, Vol. XXXIII.) London, 1850. 8vo. pp. 76. With four Plates.

13. Report of the Standing Committee on Medical Literature. Presented to the American Medical Association, at its third Annual Meeting, held in Cincinnati, May, 1850. Pamphlet, pp. 37.

14. Brighton and its sanative Resources, comprising a special Reference to the German Spa, Observations on artificial Mineral Waters, Bathing, and Sea-baths. By Edwin Lee. London: Churchill, 1850. Post 8vo. pp. 120.

15. On the containing Texture of the Blood. By William Addison, M. D., &c. pp. 18. (From the London Medical Gazette.)

16. Surgical Anatomy. By Joseph Maclise, Surgeon. London: Churchill, 1850. Folio. Fasciculus VII.

17. Portraits of Diseases of the Skin. By Erasmus Wilson, F. R. S. London: Churchill, 1850. Folio. Fasciculus VIII.

18. Notice of an unpublished Manuscript of Harvey. By G. E. Paget, M. D., &c. London: Longmans, 1850. Pamphlet, pp. 20.

19. On the Construction of Locks and Keys. By John Chubb, C. E. (From the Proceedings of the Institution of Civil Engineers.) London, 1850. 8vo. pp. 36.

20. The Elements of Materia Medica and Therapeutics. By Jonathan Pereira, M. D., &c. Third Edition. Vol. II. Part 1. London: Longmans, 1850. 8vo. pp. 900 to 1538.

21. Address before the American Medical Association at the Anniversary Meeting in Cincinnati, May 8, 1850. By J. C. Warren, M. D., President of the Association. Boston: Wilson, 1850. 8vo. pp. 65.

22. The Philosophy of Spirits in relation to Matter, showing the real Existence of two very distinct Kinds of Entity, which unite to form the different Bodies that compose the Universe, Organic and Inorganic; by which the Phenomena of Light, Heat, Electricity, Motion, Life, Mind, &c., are reconciled and explained. By C. M. Burnett, M. D. London: Highley, 1850. 8vo. pp. 312.

23. Influence of Physical Agents on the Development of the Tadpole, of the Triton, and the Frog. By John Higginbottom, Hon. F. R. C. S. E. (From the Philosophical Transactions for 1850.) Pamphlet, pp. 6. With a Plate.

24. Of the Crystalline Lens and Cataract. By Bernard Edward Brodhurst. London: Churchill, 1850. 8vo. pp. 243.

25. Operative Surgery. By Frederick C. Skey, F. R. S. London: Churchill, 1850. 8vo. pp. 709.

26. Annual Report of the Cowpock Institution, Sackville-street, Dublin, to March 31st, 1850. By Jonathan Labatt, M. D., Secretary, and H. L. Dwyer, M. D., Assistant Secretary.

27. Researches upon the Necropolis of New Orleans; with brief Allusions to its vital Arithmetic. By Bennet Dowler, M. D. New Orleans: Billo and Clark, 1850. Pamphlet, pp. 30.

28. Guide théorique et pratique pour la Guérison des Hernies, ou Nouveaux Moyens, à l'Aide desquels tout Malade peut juger de son état, diriger



son Traitement, éviter les Rechutes, et se soustraire aux Accidents consécutifs de cette Maladie; suivi d'une Notice sur l'Application des Pessaires en Gomme élastique pure, dans les Déplacements de la Matrice. Par le Dr. Cresson d'Orval, ancien Chirurgien aux Armées sous le Consulat et l'Empire. Paris: Labé, 1850. 8vo. pp. 224.

29. Recherches sur les Maladies des Os désignées sous le Nom d'Ostéomalacie, et Lettres sur la Cause principale des Morts subites survenues pendant l'Inhalation du Chloroforme. Par G. P. Stanski, D. M. P., &c. Paris: Bailliére, 1851. 8vo. pp. 128. Avec Planches coloriées.

30. Traité des Signes de la Mort, et des Moyens de prévenir les Enterrements prématures. Par E. Bouchut, D. M. Paris: Bailliére, 1849. 12mo. pp. 407.

31. The Correlation of Physical Forces. By W. R. Grove, M. A., F. R. S., Barrister at Law. Second Edition. London: Highley, 1850. 8vo. pp. 119.

32. On the Diseases of Women; including Diseases of Pregnancy and Childbed. By Fleetwood Churchill, M. D., M. R. I. A., &c. Third Edition. Dublin: Fannin and Co., 1850. Post 8vo. pp. 762.

33. The Anatomist's Vade-Mecum, a System of Human Anatomy. By Erasmus Wilson, F. R. S. Fifth Edition. London: Churchill, 1851. Post 8vo. pp. 656.

34. Additional Observations on the Nitrate of Silver; with full Directions for its Use as a Therapeutic Agent. By John Higginbottom, Hon. Fellow R. C. S. E. London: Churchill, 1850. Pamphlet, pp. 40.

35. On the existing State of our Knowledge of Vaccination and Revaccination, as a Preventive of Small-pox; being a comprehensive practical Examination of the Subject, as recently published in Nos. 23 and 24 of the London Journal of Medicine. By Alexander Knox, M. D., Physician to the Strangford Dispensary. Pamphlet, pp. 57.

36. The British Journal of Homœopathy. No. XXXV. London: Highley, January, 1851.

37. An Introductory Address, delivered at the London Hospital Medical School, at the Opening of the Session 1850-51. By Nathaniel Ward, F. R. C. S. E. London: Van Voorst, 1851. Pamphlet, pp. 31.

38. Introductory Lecture on the Study of the Roman Civil Law, delivered in the Theatre of Trinity College, Dublin, in Michaelmas Term, 1850. By John Anster, LL. D., &c. Second Edition. Dublin: Hodges and Smith, 1851. Pamphlet, pp. 51.

39. Eleventh Annual Report of the Crichton Royal Institution for Lunatics. Dumfries, 1850. Pamphlet, pp. 46.

40. Observations on the Epidemic Ophthalmia, which has prevailed in the Workhouses and Schools of the Tipperary and Athlone Unions. By W. R. Wilde, F. R. C. S. I., &c. (Reprinted from the London Journal of Medicine, of January, 1851.) Dublin: McGlashan. Pamphlet, pp. 28.

40. Introductory Address on Medical Education, with especial reference to the Course of Study required for the Degree of M. D., in the Queen's University, Ireland. By Alexander Fleming, M. D., Professor of Materia Medica, and Dean of the Medical Faculty, Queen's College, Cork. Dublin: Hodges and Smith, 1850. Pamphlet, pp. 32.

41. Handbuch der Chirurgie. Bearbeitet von Dr. Louis Stromeyer, Professor der Chirurgie, &c., in der Universität zu Freiburg. Freiburg im Breisgau: Herder, 1844 to 1850. Vol. I. in 5 Parts. 8vo. pp. 832.

42. Handbuch der Allgemeinen und Speciellen Chirurgie. Von Dr. A. Wernher, Professor der Chirurgie und Pathologischen Anatomie, &c., in der



Universität zu Giessen. Giessen: Ricker, 1846 to 1850. Parts 1 to 9, being Vol. I. pp. 1011, and Vol. II. p. 1 to p. 704.

43. Medicines, their Uses and Mode of Administration; including a complete Conspectus of the three British Pharmacopœias, an Account of all the new Remedies, and an Appendix of Formulæ. By J. Moore Neligan, M. D., &c. Third Edition. Dublin: Fannin and Co., 1851. 8vo. pp. 555.

44. The Philosophy of Vital Motion. By Charles Bland Radcliffe, M. B., &c. London: Churchill, 1851. 8vo. pp. 158.

45. Remarks on Insanity, its Nature and Treatment. By Henry Monroe, M. B., &c. Part 2. London: Churchill, 1850. 8vo. pp. 78 to 150.

46. Observations relating to the Science and Art of Medicine. By William Wegg, M. D., &c. London: Churchill, 1851. 8vo. pp. 233.

#### BOOKS AND PERIODICALS WITH WHICH THE DUBLIN QUARTERLY JOURNAL IS EXCHANGED.

1. The British and Foreign Medico-Chirurgical Review and Journal of Practical Medicine. London: Churchill and Highley. (Received No. 13.)

2. The Edinburgh Medical and Surgical Journal; exhibiting a concise View of the latest and most important Discoveries in Medicine, Surgery, and Pharmacy. Edinburgh: Black. (Recd. No. 186.)

3. Transactions of the Medical Society of London.

4. The Transactions of the Provincial Medical and Surgical Association. London: Churchill. (Not recd.)

5. The Retrospect of Medicine, being a half-yearly Journal, containing a retrospective View of every Discovery and practical Improvement in the Medical Sciences. Edited by W. Braithwaite. London: Simpkin and Co. (Recd. Vol. XXII.)

6. The Half-Yearly Abstract of the Medical Sciences, being a practical and analytical Digest of the principal British and Continental Medical Works, &c. Edited by W. H. Ranking, M. D. London: Churchill. (Received Vol. XII.)

7. Guy's Hospital Reports. London: Highley. (Recd. Vol. VII. Part 1.)

8. Pharmaceutical Journal and Transactions. Published Monthly. London. Edited by Jacob Bell. (Recd. regularly.)

9. The London, Edinburgh, and Dublin Philosophical Magazine and Journal of Science. Conducted by Sir David Brewster, Richard Taylor, Richard Phillips, Sir Robert Kane, and William Francis, Ph. D. Published Monthly. London: Taylor. (Recd. regularly.)

10. Monthly Journal of Medical Science. Edinburgh: Sutherland and Knox. (Recd. regularly.)

11. The Chemist, a Monthly Journal of Chemical Philosophy and of Chemistry. Edited by C. and J. Watt. London: Eicke. (Recd. Nos. 14 to 16. No. 12 not recd.)

12. London Medical Gazette, or Journal of Practical Medicine. Published Weekly. London: Longmans. (Recd. regularly.)

13. The Medical Times. Published Weekly. London: John Churchill. (Recd. regularly.)

14. Provincial Medical and Surgical Journal. Edited by W. H. Ranking, M. D., and J. H. Walsh, F. R. C. S. E. London: Churchill. Worcester: Deighton and Co. (Recd. regularly.)

15. London Journal of Medicine, a Monthly Record of the Medical Sciences. London: Taylor, Walton, and Maberly. (Recd. regularly.)



16. *The Journal of Psychological Medicine and Mental Pathology*. Edited by Forbes Winslow, M. D. Published Quarterly. London: Churchill. (Recd. No. 13.)
17. *The Institute; A Journal of Medical, Surgical, and Obstetrical Science, &c.* Published Weekly. (Recd. regularly.)
18. *The Quarterly Medical Recorder; being a Digest of the Progress of Practical Medicine, Surgery, Obstetricy, Medical Jurisprudence, and Pharmacy*. Edited by W. Raleigh Baxter, M. D. (Recd. Part II.)
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37. *Bulletin de l'Académie Nationale de Médecine*. Paris: Baillière. (Vol. XIII. not recd.)
38. *Journal des Connaissances Médico-Chirurgicales*. Paris: Dr. A. Martin Lauzer. (Recd. regularly.)
39. *Journal de Médecine et de Chirurgie Pratiques a l'Usage des Médecins Praticiens*. Par Lucas Champonnière. Paris. (Recd. regularly.)



40. *Recueil de Médecine Vétérinaire Pratique*. Paris: Labé. (Recd. Vol. VII. Nos. 8, 9, and 10.)

41. *Journal des Connaissances Médicales pratiques et de Pharmacologie*. Paris. (Recd. regularly.)

42. *Annales Médico-Psychologiques*. Par MM. Baillarger, Brierre de Boismont, et Cerise. Paris: Victor Masson. (Recd. regularly.)

43. *Bulletin Général de Thérapeutique, Médicale et Chirurgicale*. Recueil Pratique, Publié par le Docteur Debout. Paris. (Recd. regularly.)

44. *Annales de la Société de Médecine d'Anvers* (établie à Willebroeck.) Boom. (Not recd.)

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## NOTICES TO CORRESPONDENTS.

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WE have much pleasure in being at length enabled to present our Subscribers with the Portrait of the late Mr. Carmichael, whose Biography appeared in our Number for May, 1850. The delay, which has been altogether owing to the engraver, Mr. E. Finden, of London, is, we venture to hope, fully compensated for by the fidelity of the likeness, as copied from Mr. Burton's admirable drawing, and by the beauty of its execution.

We have received Communications from Dr. Armstrong, as Secretary of the Medical Practitioners of the Cork Union, respecting "the appointment of an unqualified person to the medical charge of an important post;" and from Dr. Kingsley of Roscrea, relative to the Medical Charities Bill for Ireland.

The numerous valuable Original Communications and Cases which appear in our present Number, have compelled us to postpone until May, Reviews of Dr. Holland's recent publications on Practical Medicine; of the Thirty-Third Volume of the Medico-Chirurgical Transactions of London; of M. Cornay's Human Morphology; and of several new books on Pathology.

In consequence of the illness of Dr. Oppenheim of Hamburg, our German, Swedish, and Danish Exchange Journals have reached us with great irregularity for the past nine months. If forwarded for the future, as soon as published, to Dr. Nathan of Hamburg, or to Messrs. Dulau and Co., Soho Square, London, through their several Correspondents in the Continental towns, directed to our Publishers, we shall receive them with punctuality.

The receipt of our American Exchange Periodicals is also, for the most part, very unsatisfactory, as their respective Editors may see on looking to our Exchange List. Owing to a mistake arising from the alteration in the title and form of "The British American and Physical Journal," our Journal was not forwarded latterly to the Editor. This mistake has been now rectified.



THE  
DUBLIN QUARTERLY JOURNAL  
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MEDICAL SCIENCE.

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7. Eléments de Morphologie Humaine, Physionomie de Relation. Localisation physionomique des plis faciaux représentatifs des différents Actes de Relation; Physionomie naturelle. Genèse des formes; Loi d'Ordre universel; Physionomie anormale. Appréciation des Lois, des Theories, et des Faits, relatifs à la Genèse des Organes; pour servir à l'Étude des Races. Par J. E. Cornay (de Rochefort), Docteur en Médecine de la Faculté de Paris, Membre correspondant de la Société des Sciences de Rochefort, de la Société des Sciences naturelles de la Charente-Inférieure, Membre de la Société ethnologique de Paris, etc., etc., . . . . .	409
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III. General Pathology, as conducive to the Establishment of rational Principles for the Diagnosis and Treatment of Disease. A Course of Lectures delivered at St. Thomas' Hospital during the Summer Session of 1850. By John Simon, F. R. S., &c.	



9. God in Disease ; or, the Manifestation of Design in Morbid Phenomena. By James F. Duncan, M. D., . . . . . 431
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11. Practical Remarks on the Treatment of Aneurism by Compression : with Plates of the Instruments hitherto employed in Dublin, and the recent Improvements by Elastic Pressure. By Jolliffe Tufnell, M. R. I. A., F. R. C. S. I., Surgeon to the City of Dublin Hospital ; Surgeon to the Dublin District Military Prison ; and Lecturer on Military Surgery in Dublin, 449
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## BOOKS AND PERIODICALS RECEIVED.

1. On the Treatment of Cancer by the regulated Application of an anæsthetic Temperature. By James Arnott, M.D., &c. London: Churchill, 1851. Pamphlet, pp. 32.
2. Pharmacopœia Nosocorum in Curam Morborum Cutaneorum. London: Highley, 1850. 32mo. pp. 48.
3. A Letter to the Right Hon. Sir G. Grey, Bart., on some of the Social Relations of the Medical Profession. By George Robinson, M. D. London: Churchill, 1850. Pamphlet, pp. 28.
4. A Letter additional to the second Edition of Truths contained in Popular Superstitions. By Herbert Mayo, M. D. Edinburgh: Blackwood, 1851. Pamphlet, pp. 12.
5. Elements of Materia Medica, containing the Chemistry and Natural History of Drugs; their Effects, Doses, and Adulterations; with the Preparations of the British Pharmacopœias. By William Frazer, L. K. and Q. C. P., &c. Dublin: Frazer, 1851. 8vo. pp. 466.
6. On the Action of the Muscular Coat of the Bronchial Tubes in Respiration. By C. R. Hall, M. D., &c. Worcester: Deighton and Co., 1851. Pamphlet, pp. 24.
7. A Guide to the Ruptured; being practical Remarks on the surgico-mechanical Treatment of reducible Rupture. By E. Halford, M. R. C. S. L. London: 1850. 12mo. pp. 76.
8. Letters on the Laws of Man's Nature and Development. By H. G. Atkinson, F. G. S., and Harriett Martineau. London: John Chapman, 1851. 12mo. pp. 390.
9. Lehrbuch der Chirurgie; von Dr. Carl Emmert, privatdocenten an der hochshule in Bern. Stuttgart: Franck, 1847 to 1850. Vol. I. in 5 Parts, pp. 890.
10. Notes of a recent Visit to several Provincial Asylums for the Insane in France. By John Webster, M. D., &c. (From the Journal of Psychological Medicine.) Pamphlet, pp. 35.
11. General Directions for Clinical Observation on the more important Points of Surgery, designed for the Use of the Students of the Queen's Hospital, Birmingham. By Langston Parker, Surgeon to the Hospital. Second Edition. Pamphlet, pp. 8.



12. London Medical Examiner, Monthly Review, and Statistical Journal of Practical Medicine. No. XII. for February, 1851.

13. Prostitution in relation to Public Health. Forming the Introductory Chapter to the Second Edition of the Treatise on Syphilis. By William Acton. (Reprinted for private circulation.) London: Churchill, 1850. Pamphlet, pp. 24.

14. A remarkable Effect of Cross-breeding. By Alexander Harvey, M. D., &c. Edinburgh: Blackwood and Sons, 1851. Pamphlet, pp. 39.

15. The Transactions of the American Medical Association, instituted 1847. Vol. III. Philadelphia, 1850. 8vo. pp. 499.

16. Practical Observations on the Treatment of Stricture of the Urethra and Fistula in Perineo. Illustrated with Cases and Drawings of these Affections. With an Appendix containing various Letters, Papers, &c., by Professor Syme, Dr. Mullar, and the Author, connected with the Subject of the Operation of Perineal Section. By John Lizars. Edinburgh: W. H. Lizars, 1851. 8vo. pp. 91, with 9 Plates.

17. General Index to the First Thirty-three Volumes of the Medico-Chirurgical Transactions. Published by the Royal Medical and Chirurgical Society of London. London: Longmans, 1851. 8vo. pp. lxxx. and 236.

18. On the Causes, Symptoms, and Treatment of Spermatorrhœa. By M. Lallemand. Translated and edited by H. J. M'Dougall, Surgeon, &c. Second Edition. London: Churchill, 1851. 8vo. pp. 411.

19. Essays and Notes on the Physiology and Diseases of Women, and on Practical Midwifery. By John Roberton, formerly Senior Surgeon in ordinary to the Manchester and Salford Lying-in Hospital. London: Churchill, 1851. 8vo. pp. 530.

20. Religion and Science, their Independence of each other, and their mutual Relations. By a Physician. London: Churchill, 1851. Pamphlet, pp. 23.

21. Surgical Anatomy. By Joseph Maclise, Surgeon. London: Churchill, 1851. Folio. Fasciculus VIII.

22. Dr. Hooper's Physician's Vade-Mecum: or, a Manual of the Principles and Practice of Physic. New Edition, considerably enlarged and improved; with an Outline of general Pathology and Therapeutics. By William A. Guy, M. B., &c. London: Renshaw and Co., 1851. Post 8vo. pp. 576.

23. Pharmacopœia ad Usus Nosocomii Phthisicorum et Pectoris Morbis ægrotantium accommodata. Editio secunda. London: Bradbury and Evans, 1851. Foolscap 8vo. pp. 42.

24. Cases in Midwifery. By the late J. G. Crosse, M. D., F. R. S. Arranged (with an Introduction and Remarks) by Edward Copeman, M. D., F. R. C. S., &c. London: Churchill, 1851. 8vo. pp. 228.

25. A Letter to the Right Hon. Lord Campbell, Lord Chief Justice of the Court of Queen's Bench, on the Clause respecting Chloroform in the proposed Prevention of Offences Bill. By John Snow, M. D., &c. London: Churchill, 1851. Pamphlet, pp. 16.

26. Annual Report of the Progress of Chemistry and the allied Sciences, Physics, Mineralogy, and Geology; including the Applications of Chemistry to Pharmacy, the Arts, and Manufactures. By Justus Liebig, M. D., Professor of Chemistry in the University of Giessen; and H. Kopp, Professor of Physics and Chemistry in the University of Giessen; with the Co-operation of Professors Buff, Dieffenbach, Ettling, Knapp, Will, and Zamminer. Edited by A. W. Hofman, Ph. D., Professor in the Royal College of Chemistry, London; and H. Bence Jones, M. D., F. R. S., Physician to St. George's Hospital. Vol. III. Part I. London: Taylor, Walton, and Maberly, 1851. 8vo. pp. 272.

27. Thirteenth Annual Report of the Suffolk Lunatic Asylum, 1850. Woodbridge: Loder, 1851. Pamphlet, pp. 30.

28. God in Disease; or, the Manifestations of Design in Morbid Phenomena. By James F. Duncan, M.D., Physician to Sir P. Dun's Hospital, Dublin. London: Nisbet, 1851. Post 8vo. pp. 224.

29. Remarks on Spasmodic or Asiatic Cholera, its true Pathology, and a more rational and energetic Plan of Treatment than has been yet suggested. By M. M'Dermott, M.D. T. C. D., Surgeon to the 89th Regiment. Dublin: Hodges and Smith, 1851. Pamphlet, pp. 28.

30. A non-medical Essay on Spasmodic Cholera. By Philo-Medicus. London: Houlston and Stoneman, 1851. Pamphlet, pp. 46.

31. Guide Pratique aux principales Eaux Minérales de France, de Belgique, d'Allemagne, de Suisse, de Savoie, et d'Italie. Par le Docteur Constantin James. Paris: Victor Masson, 1851. 8vo. pp. 523.

32. An Essay explanatory of the Tempest Prognosticator in the Building of the Great Exhibition for the Works of Industry of all Nations. (Read before the Whitby Philosophical Society, February 27, 1851.) By George Merryweather, M.D., the Designer and Inventor. London: Churchill, 1851. Third Edition. 8vo. pp. 63.

33. Pharmacopœia Collegii Regalis Medicorum Londinensis. London: Churchill, 1851. 8vo. pp. 196.

34. Urinary Deposits, their Diagnosis, Pathology, and Therapeutical Indications. By Golding Bird, A.M., M.D., &c. London: Churchill, 1851. Third Edition. 12mo. pp. 428.

35. Phthisis and the Stethoscope. A concise practical Guide to the physical Diagnosis of Consumption. By R. P. Cotton, M.D., &c. London: Churchill. 16mo. pp. 97.

36. The Threatenings of Apoplexy and Paralysis; Inorganic Epilepsy; Spinal Syncope; Hidden Injuries; the Resultant Mania, &c. By Marshall Hall, M.D., F.R.S., &c. London: Longmans, 1851. 8vo. pp. 90.

37. A practical Treatise on Diseases of the Urinary and Generative Organs (in both Sexes). Part I.—Non-specific Diseases. Part II.—Syphilis. By William Acton, late Surgeon to the Islington Dispensary, &c. London: Churchill, 1851. 8vo. pp. 693.

38. Practical Remarks on the Treatment of Aneurism by Compression; with Plates of the Instruments hitherto employed in Dublin; and the recent improvements by Elastic Pressure. By Jolliffe Tuffnell, M.R.I.A., Surgeon to the City of Dublin Hospital, &c. Dublin: Fannin and Co., 1851. 8vo. pp. 154.

39. On Syphilitic Eruptions, with especial reference to the Use of Mercury. Illustrated by Cases. By Thomas Hunt, M.R.C.S.E. London: Churchill, 1851. Pamphlet, pp. 25.

40. Papers connected with the Census of Ireland, 1851. From the Commissioners.

41. A Letter to the Right Hon. Sir George Grey, Bart., M.P., Her Majesty's Principal Secretary of State for the Home Department, &c., on Medical Registration, and the present Condition of the Medical Corporations. By Emeritus. London: Tyler, 1851. Pamphlet, pp. 22.

42. Pharmacopœia Suecica. Editio Sexta. Stockholm, 1846. 12mo. pp. 236.

43. Queen's University in Ireland. Calendar of Queen's College, Cork. Dublin: Hodges and Smith, 1851. Post 8vo. pp. 177.

44. Queen's University in Ireland. Calendar of Queen's College, Galway. Dublin: Hodges and Smith, 1851. Post 8vo. pp. 106.



45. *Le Mal de Mer, sa Nature et ses Causes, Moyens de le prévenir et de le soulager, Emplois Thérapeutiques qu'il peut recevoir dans le Traitement de certaines Maladies.* Par le Dr. Charles Pellarin. Paris : Masson, 1851. 8vo. pp. 49.

46. *The British Journal of Homœopathy.* No. XXXVI. London : Highley, April, 1851.

47. *The Prescriber's Pharmacopœia, containing all the Medicines in the new London Pharmacopœia of 1851, arranged in Classes according to their Actions, with their Composition and Doses.* By a Practising Physician. Fourth Edition. London : Churchill, 1851. 32mo. pp. 132.

48. *An Apology for the Microscope, being the Introductory Lecture to the First Course on Microscopic Anatomy and Pathology, delivered in the Theatre of the Original School of Medicine, during the Months of February, March, and April, 1851.* By Robert D. Lyons, M. B., T. C. D., L. R. C. S. I.; Ex-Clinical Assistant to the Meath Hospital; Member of the Pathological Society, Dublin, &c.; Lecturer and Demonstrator of Anatomy in the Original School of Medicine; and Honorary Professor of Anatomy to the Royal Dublin Society. Dublin : Fannin and Co. Pamphlet, pp. 45.

## BOOKS AND PERIODICALS WITH WHICH THE DUBLIN QUARTERLY JOURNAL IS EXCHANGED.

### GREAT BRITAIN.

1. *The British and Foreign Medico-Chirurgical Review and Journal of Practical Medicine.* Published Quarterly. London : Churchill and Highley. (Received No. 14.)

2. *The Edinburgh Medical and Surgical Journal; exhibiting a concise View of the latest and most important Discoveries in Medicine, Surgery, and Pharmacy.* Published Quarterly. Edinburgh : Black. (Recd. No. 187.)

3. *The Retrospect of Medicine, being a half-yearly Journal, containing a retrospective View of every Discovery and practical Improvement in the Medical Sciences.* Edited by W. Braithwaite. London : Simpkin and Co.

4. *The Half-Yearly Abstract of the Medical Sciences, being a practical and analytical Digest of the principal British and Continental Medical Works, &c.* Published Half-Yearly. Edited by W. H. Ranking, M. D. London : Churchill.

5. *Guy's Hospital Reports.* London : Highley.

6. *Pharmaceutical Journal and Transactions.* Published Monthly. London. Edited by Jacob Bell. (Recd. regularly.)

7. *The London, Edinburgh, and Dublin Philosophical Magazine and Journal of Science.* Conducted by Sir David Brewster, Richard Taylor, Richard Phillips, Sir Robert Kane, and William Francis, Ph. D. Published Monthly. London : Taylor. (Recd. regularly.)

8. *Monthly Journal of Medical Science.* Edinburgh : Sutherland and Knox. (Recd. regularly.)

9. *The Chemist, a Monthly Journal of Chemical Philosophy and of Chemistry.* Edited by C. and J. Watt. London : Eicke. (Recd. regularly.)

10. *London Medical Gazette, or Journal of Practical Medicine.* Published Weekly. London : Longmans. (Recd. regularly.)

11. *The Medical Times.* Published Weekly. London : John Churchill. (Recd. regularly.)

12. *Provincial Medical and Surgical Journal.* Edited by W. H. Ranking, M. D., and J. H. Walsh, F. R. C. S. E. Published Fortnightly. London : Churchill. Worcester : Deighton and Co. (Recd. regularly.)

13. London Journal of Medicine, a Monthly Record of the Medical Sciences. London: Taylor, Walton, and Maberly. (Recd. regularly.)
14. The Journal of Psychological Medicine and Mental Pathology. Edited by Forbes Winslow, M. D. Published Quarterly. London: Churchill. (Recd. No. 14.)
15. The Institute; A Journal of Medical, Surgical, and Obstetrical Science, &c. Published Weekly. (Discontinued with No. 13, Vol. II.)
16. The Quarterly Medical Recorder; being a Digest of the Progress of Practical Medicine, Surgery, Obstetrics, Medical Jurisprudence, and Pharmacy. Edited by W. Raleigh Baxter, M. D. (Not recd.)
17. The Athenæum—Journal of English and Foreign Literature, Science, &c. Published Weekly. London. (Recd. regularly.)

## AMERICA.

18. The American Journal of the Medical Sciences. Edited by Isaac Hays, M. D. Published Quarterly. Philadelphia: Lea and Blanchard. (Recd. Nos. 40 and 41.)
19. The Medical Examiner and Record of Medical Science. Edited by F. G. Smith, M. D. Published Monthly. Philadelphia: Lindsay and Blakiston. (Recd. Nos. 11 and 12 of Vol. VI., and No. 1 of Vol. VII.)
20. The New York Journal of Medicine and the Collateral Sciences. Edited by S. S. Purple, M. D. Published Monthly. New York: Hudson. (Recd. Vol. VI. No. 2. Vol. V. No. 3, and Vol. VI. No. 1, not recd.)
21. The American Journal of Science and Arts; conducted by Professors Silliman and B. Silliman, Jun., and J. D. Dana. Published Bi-monthly. New Haven. (Recd. Nos. 31 and 32.)
22. The American Journal of Insanity. Edited by the Officers of the New York State Lunatic Asylum, Utica. Published Quarterly. (Recd. Nos. for April, July, and October, 1850.)
23. The British American Medical and Physical Journal. Published Monthly. Montreal. (Recd. regularly.)
24. The American Journal and Library of Dental Science. Published under the auspices of the American Society of Dental Surgeons. Published Quarterly. (Recd. Vol. X. No. 4, and Nos. 1 and 2, New Series.)
25. The Boston Medical and Surgical Journal. Published Weekly. Boston: Clapp. (Recd. Parts 232, 235, 237, and 238. Part 236 not recd.)
26. Southern Medical Reports. Edited by D. E. Fenner, M. D. To be published Annually. New Orleans: Norman. (Recd. Vol. I. 1849. We accept the exchange.)
27. The Stethoscope and Virginia Medical Gazette. Edited by P. C. Gooch, M. D. Published Monthly. Richmond: Virginia. (Recd. No. 1. We accept the exchange.)

## FRANCE AND BELGIUM.

28. Gazette Médicale de Paris. Published Weekly. Paris. (Recd. regularly.)
29. Nouvelle Encyclographie des Sciences Médicales. Publiée par une Société de Médecins. Published Monthly. (Recd. Vol. XII. for 1850.)
30. Journal de Chimie Médicale, de Pharmacie, de Toxicologie, et Revue des nouvelles, scientifiques, nationales et étrangères, &c. Published Monthly. Paris: Labé. (Recd. regularly.)
31. Journal de Pharmacie et de Chimie, &c. Published Monthly. Paris: Victor Masson. (Recd. regularly.)



32. L'Union Médicale, Journal des intérêts scientifiques et pratiques, moraux et professionnels du Corps médical. Published three times a Week. Paris. (Recd. regularly.)

33. La Lancette Française, Gazette des Hôpitaux civils et militaires. Published three times a Week. Paris. (Recd. regularly.)

34. Revue Médicale Française et étrangère, Journal des Progrès de la médecine hippocratique. Published twice a Month. Par J. B. Cayol. Paris. (Recd. regularly.)

35. Revue Médico-Chirurgicale de Paris. Sous la Direction de M. Malgaigne. Published Monthly. (Recd. regularly.)

36. Archives générales de Médecine; Journal Complémentaire des Sciences Médicales. Published Monthly. Paris: Labé. (Recd. regularly.)

37. Bulletin de l'Académie Nationale de Médecine. Published Monthly. Paris: Baillière. (Vol. XIII. not recd. and no Parts of Vol. XV.)

38. Journal des Connaissances Médico-Chirurgicales. Published twice a Month. Paris: Dr. A. Martin Lauzer. (Recd. regularly.)

39. Journal de Médecine et de Chirurgie Pratiques a l'Usage des Médecins Praticiens. Published Monthly. Par Lucas Champonnière. Paris. (Recd. regularly.)

40. Recueil de Médecine Vétérinaire Pratique. Published Monthly. Paris: Labé. (Recd. Vol. VII. No. 12, and Vol. VIII. Nos. 1 and 2. No. 11, of Vol. VII. not recd.)

41. Journal des Connaissances Médicales pratiques et de Pharmacologie. Published twice a Month. Paris. (Recd. regularly.)

42. Annales Médico-Psychologiques. Par MM. Baillarger, Brierre de Boismont, et Cerise. Published Quarterly. Paris: Victor Masson. (Recd. regularly.)

43. Bulletin Général de Thérapeutique, Médicale et Chirurgicale. Recueil Pratique. Publiée par le Docteur Debout. Published twice a Month. Paris. (Recd. regularly.)

44. Répertoire de Pharmacie. Recueil pratique. Par M. le Dr. Bouchardat. Published Monthly. (Recd. Nos. 1 to 9, Vol. VII.)

45. Gazette Médicale de Strasbourg. Published Monthly. (Recd. Nos. 1 to 3, for 1851.)

46. Gazette Médicale de Montpellier. Par le Docteur Chrestien. Published Monthly. (Recd. Vol. XI., No. 12.)

47. Annales d'Oculistique, publiées par le Dr. Florent Cunier, Bruxelles. Published Quarterly. (Recd. No. 1, for 1851.)

#### GERMANY.

48. Zeitschrift für die gesammte Medicin mit besonderer Rücksicht auf Hospitalpraxis und ausländische Literatur. Von Dr. F. W. Oppenheim. Published Monthly. Hamburg. (Recd. Vol. XLV., Parts 1 and 2; Vols. XLIII. and XLIV. not recd.)

49. Tagsberichte über die Fortschritte der Natur-und Heilkunde, erstattet von R. Froriep zu Weimar. (Not recd.)

50. Zeitschrift für rationelle Medicin; herausgegeben Von Dr. J. Henle und Dr. C. Pfeufer, Professoren der Medizin an der Universität zu Heidelberg. Published Monthly. (Not recd.)

51. Medicinische Jahrbücher des Kaiserlichen Königlichen Oesterreichischen Staats. Wien. (Not recd.)

52. Oesterreichische Medicinische Wochenschrift als Ergänzungsblatt der Medicinischen Jahrbücher, &c. (Not recd.)

53. Journal für Chirurgie und Augenheilkunde herausgegeben von Dr. P. von Walther und Dr. T. A. von Ammon. Berlin. (Not recd.)

54. Vierteljahrschrift für die praktische Heilkunde, herausgegeben von der medicinischen Facultät in Prag. Published Quarterly. Karl André. (Recd. Part 4, 1850. Parts 2 and 3 not recd.)

55. Forum für Medicinal angelegenheiten im Interesse des Gemeinwohls und des ärztlichen Standes. Redacteur: Dr. Halla. Prag. Karl André. (Not recd.)

56. Deutsche Klinik. Zeitung für Beobachtung aus deutschen Kliniken und Krankenhäusern. Herausgegeben von Dr. Alexander Göschel. Berlin. Published Weekly. (Recd. No. 1.)

57. Annalen der Chemie und Pharmacie. Herausgegeben von F. Wöhler und J. Liebig. Published Monthly. Heidelberg. (Recd. Vol. LXXVI., Part 1. The only Number recd. since January, 1850.)

58. Canstatt's Jahresbericht über die Fortschritte der gesammten Medicin in allen Ländern. Redigirt von Dr. Eisenmann. Erlangen: Ferdinand Enke.

#### DENMARK.

59. Bibliothek for Læger, Tredie Række. Udgivet af Direktionen for de classenske Literaturselskab. Redigeret af H. Selmer. Published Monthly. Kjobenhavn. (Not recd.)

#### NORWAY.

60. Norsk Magazin, for Lægevidenskaben, udgivet af det medicinske Selskab i Christiania. Redigeret af W. Boeck. Faye. A. W. Münster. Lund. Voss. Published Monthly. Christiania: Feilberg & Landmark. (Not recd.)

#### SWEDEN.

61. Hygiea, Medicinsk och Pharmaceutisk Månads-Skrift. Published Monthly. Stockholm: Fritze. (Recd. Vol. XII. Nos. 1 to 9. Parts 9 to 12, Vol. XI., not recd.)

#### ITALY.

62. Gazzetta Medica Lombarda. Diretta dal Prof. Panizza. Formerly the Gazzetta Medica di Milano. Milan. (Not recd.)

63. Gazzetta dell' Associazione Medica degli Stati Sardi. Turin. Published Monthly. (Recd. Nos. 1 to 3, 1851.)

64. Annali Universali di Medicina. Compilati dal Dottore Carlo-Ampe-lio Calderini. Milan. Published Monthly. (Recd. Part 3, Vol. CXXXIV.)

65. Il Raccoglitore Medico di Fano; Giornale di Medicina e Chirurgia. Dal Dott. Malagodi e Franceschi. Published twice a Month. (Recd. Nos. 1 to 4, for 1851.)

66. Osservatore Medico di Naples. (Not yet recd.)

67. Gazzetta Medica Italiana Federativa Toscana. Florence. Published Weekly. (Recd. Nos. for 18th and 25th March, 1851.)

#### SPAIN.

68. Boletín de Medicina, Cirugía, y Farmacia; Periodico oficial de la Sociedad Médica General de Socorros Mutuos. Madrid. Published Weekly. (Recd. Nos. 1. to 11, and No. 13, for 1851.)

69. Gaceta Medica. Periodico de Medicina, &c. Madrid. Published every ten days. (Recd. Nos. 217 to 222, and No. 225.)



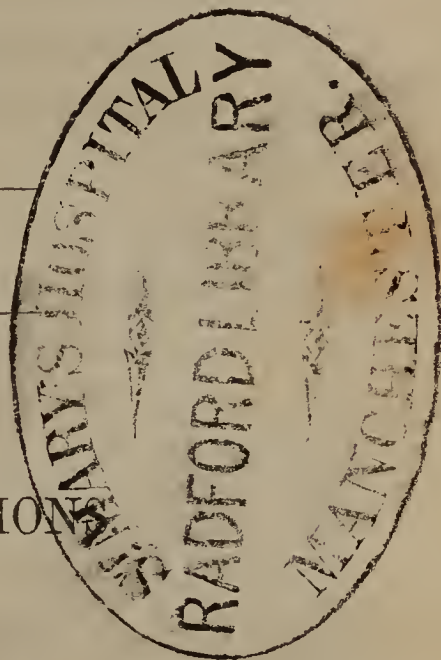
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PART I.  
ORIGINAL COMMUNICATION



ART. I.—*Observations on the Nature and Treatment of various Diseases.* By ROBERT J. GRAVES, M. D., F. R. S.

(Continued from vol. iii. p. 347.)

SINGULAR DEFECT AND IMPOTENCE OF MEMORY AFTER PARALYSIS.

A FARMER in the county of Wicklow, in comfortable circumstances, when fifty years of age, had a paralytic fit, in the year 1839; since that time he never recovered the use of the affected side, and still labours under a painful degree of hesitation of speech. He is, however, able to walk about, take a great deal of active exercise, and superintend the business of his farm. His memory seems to be tolerably good for all parts of speech except noun-substantives and proper names; the latter he cannot at all retain; and this defect is accompanied by the following singular peculiarity: that he perfectly recollects the initial letter of every substantive or proper name for which he has occasion in conversation, though he cannot recall to his

memory the word itself. Experience, therefore, has taught him the utility of having written in manuscript a list of the things he is in the habit of calling for or speaking about, including the proper names of his children, servants, and acquaintances: all these he has arranged alphabetically in a little pocket dictionary which he uses as follows: if he wishes to ask any thing about a cow, before he commences the sentence he turns to the letter C, and looks out for the word “cow,” and keeps his finger and eye fixed on the word until he has finished the sentence. He can pronounce the word “cow” in its proper place, so long as he has his eye fixed upon the written letters; but the moment he shuts the book it passes out of his memory, and cannot be recalled, although he recollects its initial, and can refer to it again when necessary. In the same way when he comes to Dublin, and wishes to consult me (for my name is among the indispensable proper names in his dictionary), he comes with his dictionary open to the hall-door, and asks to see Dr. Graves; but, if by accident he has forgotten his dictionary, as happened on one occasion, he is totally unable to tell the servant what or whom he wants. He cannot recollect his own name unless he looks out for it, nor the name of any person of his acquaintance; but he is never for a moment at a loss for the initial which is to guide him in his search for the word he seeks.

His is a remarkably exaggerated degree of the common defect of memory, observed in the diseases of old age, and in which the names of persons and things are frequently forgotten, although their initials are recollected. It is strange that substantives and proper names, words which are the first acquired by the memory in childhood, are sooner forgotten than verbs, adjectives, and other parts of speech, which are a much later acquisition.

A lady about fifty years of age, who was labouring under what is popularly termed a breaking up of the system,—that is, a simultaneous decrease in the energy of all the vital func-



tions,—showed among the first symptoms a defect of memory similar to that which I have related above. The first name which she was perceived frequently to forget was that of a family with whom she was very intimate, and whom she saw almost every day, and she was much tormented by this defect, whenever she had occasion to refer to any of its members in conversation. After a time this defect extended to the names of other persons and things; in the course of a few months she lapsed into a general want of memory, and weakness of intellect.

It is interesting to compare such cases with the temporary loss of memory which is produced by inebriety, and the permanent loss of the same faculty that shows itself in old age. Such a comparison proves that diseases of the brain occasion a defect of memory, which is but an exaggeration of that observed in old age and in inebriety; and it is, therefore, to be attributed not to any affection of any particular portion of the brain, but to a general derangement of the cerebral functions. Some medical men are inclined to think that where, under such circumstances, the memory is very deficient and the intellect weak, softening of the brain exists; but the preceding observations show that such a conclusion is derived from a very partial view of the subject, inasmuch as the patient, whose case I have first referred to, is still living, and is much in the same state that followed the paralytic stroke eleven years ago.

The effects produced on the memory by paralysis are by no means proportionate to the loss of muscular power that the disease gives rise to; and the same disproportion exists also with respect to the generative powers. Thus I have known several cases in which young men who were attacked with apoplexy and hemiplegia, from which they recovered with a very imperfectly restored muscular power of the limbs and speech, became subsequently the fathers of several healthy children. On the other hand I have seen two cases where the cerebral attack was so slight as not to produce more than a

transitory giddiness, a passing feeling of terror, and some hesitation of speech, with a little subsequent numbness in the arm and cheek, and slight weakness of the leg at the same side. All these palpable symptoms passed away within twenty-four hours, leaving behind scarcely an evident trace of diminished power in the limbs, and no impairment of any of the senses, articulation, or memory; yet the cerebral attack occasioned, from the very moment of its occurrence, a complete impotency, which in both cases has been for many years permanent, although, as I have said before, both individuals are in other respects quite healthy.

#### PARALYSIS AFFECTING THE TEETH.

In a former paper I remarked that although the teeth are possessed of an exquisite sense of touch, and are frequently the seat of intense pain, yet no one (as far as I could ascertain) had observed in paralysis a loss of sensation in the teeth. I have been for years on the watch for this symptom, and have at length detected it in a gentleman who has had several attacks of hemiplegia, each accompanied by complete numbness of all the teeth at one side of his mouth.

#### LETHARGY.

It is curious how certain derangements of the functions of the brain occur, without being accompanied by other notable symptoms of disease. Thus I know a gentleman advanced in life and of plethoric habits, who has been for several years affected with lethargic symptoms, but without any headach, tendency to paralysis, or impairment of his general mental energies. He is frequently attacked, however, even at his meals, with unconquerable sleepiness, and it is surprising how suddenly it comes on; thus he will be sitting, talking quite cheerfully, and unexpectedly he drops into a sleep, which lasts for about half a minute or a minute, and then he arouses himself and continues awake for a few minutes longer. This happens so often that he cannot now venture to go into company.



And, as I have said before, this drowsiness comes on so quickly that at one meal he has broken three or four glasses by becoming unconscious after the act of filling the glass, and during the time he was raising it to his mouth. He was consequently obliged to have an attendant to watch him going to bed, lest he might fall asleep in an inconvenient place or position, or might endanger the safety of the house by allowing the candle to fall. Whether his immunity from other symptoms arises from a seton in his neck, which he was advised in London to have inserted, I cannot tell; but this state of the cerebral functions, existing so long and without any additional symptoms, is very curious.

#### NEURALGIC RHEUMATISM.

In December, 1848, I was called to see a gentleman of middle age and robust constitution, who was attacked by a very singular variety of "neuralgic rheumatism." He had caught cold from wet feet, and was seized with feverish symptoms, and violent pains in the nerves of the lower extremities. All the muscles of the thighs, calves, legs, and feet, seemed to be more or less affected, and the pain was most agonizing, being accompanied by spasms of the muscles, in violence and intensity resembling those witnessed in Asiatic cholera. I caused the affected limbs to be constantly stuped with a decoction of poppy-heads, and rubbed with an oily narcotic liniment. Finding, however, that the relief obtained by these means was only partial, I gave him internally large doses of Dover's powder combined with James' powder, and took blood from his arm; and I caused the lower extremities to be bandaged carefully, commencing at the toes, and proceeding upward to the thighs. These means were effectual, and cured the disease in less than two days; but after the pain had ceased there was, however, (as might be expected), some loss of power in the extremities for a short time. This was the second time that the patient had been attacked in this singular way.

I have seen a person nearly suffocated by acute pleurodynia,

when this disease attacked the intercostal muscles of both sides of the chest, and I have no doubt that suffocation may happen from the spasms of cholera when they attack the muscles of respiration generally, or those of the glottis in particular.

Thus I recollect attending, at Merrion, in 1834, with Mr. R. Wilkinson, of Blackrock, a lady affected with Asiatic cholera, in whom the spasms of the intercostal muscles at both sides were so continuous and so violent,—and in whom, consequently, the respiratory movement was proportionately painful, that the affection had nearly proved fatal by the impediment it threw in the way of the motion necessary for carrying on the act of breathing. Among the numerous patients whom I have seen affected with cholera, this was the only case where the spasms occupied the intercostal muscles.

#### ATONIC GOUT.

The following case exhibits some interesting particulars as to the causes which are capable of exciting gout in a constitution hereditarily predisposed to that disease. A watch-glass maker, of regular habits and steady conduct, enjoyed a robust state of health until he arrived at the age of eighteen years, when he undertook a journey to America, and was constantly sea-sick for the first five days of the voyage; at the end of which time the constant throwing up of bile and the nausea ceased, but gout suddenly appeared in both his feet, and the characteristic redness and swelling of the balls of the great toes were accompanied by agonizing pain. Among the books which he had taken with him was a copy of “Buchan,” in which he found it recommended to take abundance of wine, in order to keep the gout out of the stomach. He followed this advice, and in about a week the gout left him, and he was perfectly well when he arrived at New York, after a voyage of twenty-three days. He had no fit of gout for twenty-three years after; since then, however, he has had repeated attacks, and I am now (19th January, 1849) attending him, in his sixtieth year,



in a violent paroxysm of the disease, occupying both feet and one of his knees. The causes which brought on the gout in his first attack are interesting, inasmuch as the circumstances of the case prove, first, that a nausea and vomiting, continuing several days, accompanied, as always happens in sea-sickness, by an unusual discharge of bile, is not capable of preventing an attack of gout. Secondly, that the operation of whatever debilitates the system predisposes the patient to an attack of gout. Upon this subject Dr. Todd has made some very judicious observations in his treatise on gout. Thirdly, we may learn from the particulars of this case that the treatment adapted for gout differs much from that to which we have recourse in rheumatism and other inflammations. I lately saw a striking illustration of this in a gentleman whom I was attending with Mr. Hamilton. We had been obliged to exhibit mercury rather copiously for the cure of certain venereal symptoms, and had brought on a profuse salivation. Two days after the salivation had commenced our patient was attacked with a violent and regular fit of podagra in the ball of the right great toe; this fit lasted several days, during the whole of which time the salivation continued.

It is worth remarking that a hereditary disposition to gout may lie dormant in the system during a long series of years. Of this I saw a remarkable instance in a lady upwards of seventy years of age when I first commenced my attendance on her. Her parents had been martyrs to gout, and the dyspeptic symptoms, of which she chiefly complained, were such as are often observed in gouty persons. Accordingly, I gave it as my opinion that she had a gouty diathesis. This opinion was not verified until she had attained to the age of eighty-two years, when she had a violent attack of gout, first in her right foot, and afterwards in her left.

Dr. Neligan has furnished me with an illustrative example of this fact in the case of the Hon. E. M., in whose family gout has long been an heir-loom. His first attack occurred when he

was in his seventy-first year, and he died, from a third attack, in about three months afterwards; his sister, also, was attacked with the disease, for the first time, in her sixty-fifth year; yet several members of his family, amongst others his only son, were martyrs to gout from their youth.

A fact I observed very lately tends also to corroborate the opinion that the local inflammation of gout may be induced by debility: a gentleman dying of long-continued diarrhœa, combined with a dropsical tendency, was seized with podagra forty-eight hours before death.

#### EFFECTS PRODUCED UPON THE STOMACH BY GRIEF.

In the first Series of this Journal I described some cases which exemplified the effects produced by nervous agitation upon the functions of certain organs, and afterwards upon their textures.

The first case was that of a young lady, residing in Camden-street, who was frightened at night by a sudden fire, which threatened to destroy the house in which she lived. During the moments of danger she got a pain in the stomach, which recurred frequently for several months, and finally was succeeded by symptoms of ulceration in that organ, from which, nevertheless, she unexpectedly recovered. Several years afterwards she died of another disease. The body was examined by Dr. Ireland and myself, when we discovered that a very large ulcer had existed in her stomach, which had afterwards healed, but which, in the first instance, was prevented from discharging the contents of the stomach into the abdominal cavity by adhesion with one of the neighbouring viscera, caused by effused lymph.

The second case was that of a young and healthy lady, over whose shoulder a musket was suddenly discharged in frolic by an inebriated man. She fell down in a fit of hysteria from the fright, became subject to violent palpitations of the heart, and died in the course of some years, labouring under the effects of



general dropsy, produced by heart complaint. I examined her body, and found great enlargement of the heart, and various organic changes in the valves.

I have lately seen a case analogous to this, and which exemplifies, in a manner equally striking, the effects of the mind on the body. A grocer, of very healthy constitution and full habit, became suddenly involved in pecuniary difficulties, having, in consequence of railway speculations in 1847, lost a large sum of money, and not been able to meet his engagements. He experienced, from having been perfectly healthy, a total disappearance of appetite and a loss of sleep, which afflicted him for several weeks. His appetite he scarcely at all recovered; he became emaciated, and at times feverish. But after a few months he began to feel transient pains in his stomach, together with a sensation as if something was turning or moving in it. These pains latterly became more frequent, and the progress of the disease uninterrupted, exhibiting in its course all the symptoms of organic disease of the stomach. It is now two years since it commenced, and large tumours are to be felt in the neighbourhood around the pyloric orifice of the organ. The tumours are hard and scirrhus; he is emaciated to the last degree, and his case is evidently hopeless.

#### EPIDEMIC OF MUMPS.

In December, 1848, and January, 1849, the mumps, *cynanche parotidæa*, became suddenly epidemic in Dublin, attacking both middle aged and young persons, in the city and adjoining districts. The outbreak of this epidemic was very sudden and remarkable; and although in most cases the sources of contagion could be pointed out, yet in many families the most accurate investigation failed in discovering the manner in which the individual first affected had contracted the disease.

As *cynanche parotidæa* is confessedly a contagious disease, the epidemic in question exhibits two important features: first, the sudden manner in which a contagious disease which has

long lingered in society in a subdued, and, as it were, a latent form, blazes out into an epidemic, when a state of atmosphere favourable to its propagation occurs. In the instance before us the weather during the whole time of the prevalence of the disease was remarkably mild, and almost unintermittingly damp and rainy. The temperature was equable, and the moisture of the air extreme. The only variation was an alternate calm and stormy state of the atmosphere; for during these two months, calm and stormy days succeeded each other in a very extraordinary manner.

The second point worthy of observation is connected with the appearance of the disease in families where the contagion could not be traced. It is on similar cases that the anti-contagionists, as regards the propagation of cholera, chiefly rely.

But the argument thus derived from negative evidence appears to me (as I have elsewhere remarked) to be totally inconclusive. It proves, in fact, too much; and would lead us to reject the contagiousness of mumps, small-pox, scarlatina, and all other diseases, the infectious nature of which is most undoubted. It may be worth observing, that in this epidemic of mumps, several of the adults infected by the disease were attacked with great severity, and laboured under no slight febrile symptoms,—symptoms which continued for several days after the swelling of the parotid glands disappeared, so that the patient could not be pronounced convalescent until about the fourteenth day. I did not see any fatal cases; but some of my patients were so ill, that I could not consider their condition to be unattended with danger.

Metastasis to the testicle I observed in one case: it took place quite suddenly, and in the mode of its attack strikingly resembled another case at that time under my care, in which inflammation of the testicle came on during the last stage of gonorrhœa. In this gentleman nothing but rest and the anti-phlogistic treatment had been employed, and the discharge had become quite slight, and unattended with pain for more than



a fortnight. This and other similar cases have awakened in my mind the suspicion, that inflammation of the testicle is, in gonorrhœa as in mumps, a part and parcel of the disease, of unfrequent occurrence, it is true, but, when it does occur, not dependant on the degree of urethral irritation or its treatment.

#### INFLAMMATION OF THE LARYNX, FROM ACCIDENTAL CAUSES.

The three following examples of inflammation of the larynx, brought on by accidental contact with irritating substances, may not prove uninteresting. On the 20th September, 1849, I visited a lady labouring under premonitory symptoms of cholera, and prescribed the acetate of lead and opium pills in my usual form; they were quite effective in stopping the further progress of the disease, but one went the wrong way, or, in other words, in the attempt to swallow it, passed into the larynx, and thus gave rise to fits of coughing frequently repeated, until at last it was expectorated. These pills, being soft, were easily dissolved, and consequently, though the foreign substance remained in the air passages but a short time, yet that time was sufficient for the contact to give rise to an inflammatory affection of the mucous membrane of the larynx, and a consequent hoarseness, which lasted for nearly a week. In this case, the irritative substance was the acetate of lead undiluted.

In the case I am about to mention next, irritation was caused by the vapour of nitric acid, and the occurrence took place in the following unexpected manner. I was requested, at the desire of Dr. Mahood, of Kingstown, to see an old lady labouring under chronic bronchitis. Amongst other remedies I advised the application of St. John Long's liniment to the chest; it was sedulously applied night and morning. The room in which the patient lay was small; and a child, about two years old, slept in the bed next her, and was exposed to the inhalation of the air tainted with the vapour of the liniment; laryngeal cough was the consequence; it lasted for a few days, but was

immediately diminished by the child being removed to another room.

In the third case, more serious consequences had nearly followed a somewhat similar accident. I was attending, with Mr. Hans Irvine, a gentleman who had a chronic enlargement of the liver, and we advised the application of a nitro-muriatic acid lotion. His mother procured a bottle from a neighbouring apothecary, who marked it "concentrated nitro-muriatic acid"; she proceeded to mix some of this with water, for the purpose of making the lotion; when the fumes arising from the bottle caught her breath, and produced inflammation of the larynx, and of the bronchial tubes, which had nearly proved fatal. I blame myself for not having taken the precaution to order diluted acid to be used in making the lotion.

#### MALIGNANT FEVER OF EXTREME VIRULENCE.

On the 3rd of January, 1850, I saw a young woman, aged about eighteen years, who had previously enjoyed tolerably good health, and appeared to be sufficiently robust and *embonpoint*. On the night of the 2nd she was suddenly seized with pains in the stomach and bowels, and constant vomiting, preceded by rigors and symptoms of fever. When I saw her, the tongue was extremely parched, and her pulse frequent; she complained of a sense of tension about the face, and disagreeable creeping itchiness of the skin of various parts of her body; so that I expected the formation of erysipelas of the face and head. On the following day I found her affected with an extraordinary symptom, viz., a blackness around the eyes, perfectly well defined; first, on the upper lid, then extending to the lower, in such a way that she appeared as if looking through a black circle. This blackness appeared as if it had been put on with a camel's-hair pencil, and resembled exactly that which occurs in ecchymosis from severe bruises. She had an eruption on her skin similar to measles, but dark-coloured. In a few hours she died of hemorrhage from the



kidneys. This, I think, is the most rapidly fatal case of hemorrhagic fever that I ever witnessed.

#### DIFFUSE INFLAMMATION.

The danger of diffuse inflammation is too familiar to the profession. One variety of it seems, in the first instance, to combine the peculiar spreading character of this inflammation and the exquisite pain observed in phlegmasia dolens: of this I have seen many examples. The swelling, like that of phlegmasia dolens, is unattended with redness, but accompanied by heat; and the inflammation appears to diffuse itself speedily in the subcutaneous areolar tissue, where a serous fluid is deposited as the inflammation spreads.

Two years ago I witnessed a fatal result in the case of a very healthy young lady whose right foot was excoriated by the binding of her shoe while walking; she neglected the slight abrasion, and walked for several days in continuance, wearing the same shoe. She was in perfect health at dinner time on the fourth day, but on going to bed she complained of a sudden accession of pain in the right foot, with heat and some swelling, but there was no discoloration. The foot was bathed and stuped, but she passed the night in great agony. At 2 o'clock the following afternoon, or about eighteen hours after the commencement of the disease, I first saw her, when she was raving; her pulse could scarcely be counted; and the swelling had extended above the middle of the thigh. I immediately requested the assistance of Sir Philip Crampton, who saw her in consultation with me, but she died within twenty-four hours.

This case left a very melancholy impression on my mind, and convinced me of the necessity of urging active measures in the very commencement of the disease. Their efficacy I lately had an opportunity of proving. A lady who had a bunion on the right foot occasionally complained of swelling in that part, and now and then a drop of fluid issued from its

surface. When any aggravation of this annoyance took place, she was in the habit of resting the foot for a few days, and using a loose, soft slipper. In spite of these precautions, however, the bunion one day became a little inflamed, but not so much so as to attract any serious attention. At bed-time, however, she was suddenly attacked with pain, so intense that she was obliged to scream out, and could no longer walk; her stocking was taken off with the greatest difficulty, when the instep was found to be swollen, white, and hot, and so intensely painful that she could not bear the touch of a camel's-hair brush without screeching. I happened to be attending another member of the family, and was in the house at the time. I immediately apprehended the greatest danger, and was determined to use active measures, in hopes of suppressing the disease at the commencement. While leeches were being procured, I could observe an evident increase in the size of the swelling and its progress towards the ankle. I should have observed that the sole of the foot was as acutely tender as the instep. I directed the application of relays of leeches, six at a time, to the most painful parts, and sent for Mr. Cusack, who concurred with me in thinking that if the disease was not speedily arrested, it would prove fatal. Three relays of leeches and emollient poultices, however, stopped its further progress. The first set of leeches scarcely drew anything but serum, tinged with a small portion of blood; from the punctures of the second set, a fluid more decidedly sanguineous issued; and the bites of the third set were followed by blood of the usual appearance.

#### SPONTANEOUS FORMATION OF POISON IN THE HUMAN BODY.

On a former occasion I detailed the particulars of several cases which seemed to prove that wounds and accidents affecting external parts may give rise to symptoms plainly denoting the operation on the constitution of a poison manufactured, if I may use the expression, in the injured skin and



subcutaneous tissue. The following facts corroborate that conclusion.

A healthy child, the daughter of a friend of mine, scratched her nose with a blunt nail. The wound inflamed, and subsequently festered, and in several days after, the face, forehead, and at a later period the trunk, became more or less covered with an eruption somewhat resembling ecthyma. The child got well in a fortnight, under the local application of soothing remedies and the internal use of lime-water with milk, which was given to obviate a looseness of bowels that followed the appearance of the eruption. It is curious that the matter from the pustules infected three of her little nursery play-fellows. As soon as this fact was noticed, the children were separated from each other, and the nascent pustules were checked in their progress by applying a weak solution of nitrate of silver. They all recovered. The case is interesting, as affording an additional proof, not only that an injury may cause the human body to manufacture a poison capable of infecting the constitution of the individual, but that the matter so formed may be capable of infecting by contact other persons.

In the case of Miss G——, aged sixteen years, who laboured under fever, bed-sores formed on the sacrum and hips, which gave much trouble and were very obstinate; but, notwithstanding, there seemed to be some chances of her recovery, when, on the twenty-fifth day of her fever, during the nocturnal delirium, she bit off a large portion of her right thumb nail, and injured it to the quick; it inflamed rapidly, and the finger swelled, the lymphatics of the right arm became indurated, and the whole extremity swollen. After a few days the body was covered with large vesicles, many of which were confluent, and contained an opaque whitish serum; there was also an increase of constitutional irritation and of fever. She died on the thirty-second day. In this case it is doubtful whether

the poison originated in the bed-sores, or in the injured thumb.

I saw, in the spring of 1848, another young lady who laboured under typhus fever, and who, after a long struggle, was apparently about to undergo a favourable crisis, when suddenly the skin of her scalp, that had been blistered previously, and had healed but imperfectly, became erysipelatous. The disease spread slowly at first to the forehead and eye-lids, in which matter formed abundantly, and was after some days let out with the lancet. The erysipelas now extended to the neck and between the shoulders, assuming daily a more unfavourable character, and producing, as it spread, much subcutaneous œdema attended with the formation of sero-purulent matter, as is usual in cases of diffuse inflammation. Her state became rapidly worse, vesicles containing sero-purulent matter formed on her skin, and at last many of her joints, both large and small, became the seats of puriform deposition shortly before her death.

I think I have been able to trace many of the symptoms observed in *rupia cachectica*, and in the worst forms of secondary lues and pseudo-syphilis to the operation of a poison formed in irritated ulcers, whether in the throat or other parts. Hitherto pathologists have considered these constitutional effects to be the result of a poison introduced into the system from without. I hope on a future occasion to discuss this important question with the care it deserves.

#### ANIMAL FOOD IN DYSENTERY.

In an excellent paper by Dr. Mayne, published in the last number of this Journal, some judicious remarks are made respecting the utility of tender animal food in dysentery, after the first stage of active inflammation has passed, remarks strongly corroborating what I have already written on that point of practice, and the accuracy of which is confirmed by the following passage, taken from a very interesting work entitled "The Shoe and Canoe," by John J. Bigsby, M.D.



“ Donkin’s preserved meat is an admirable substitute for the recently killed animal. A transport between the tropics, full of soldiers and their families, under my medical charge, became generally attacked with dysentery, *against which medicine seemed powerless.* In the course of three or four days I distributed among the soldiers 750 pounds of Donkin’s preserved meat, and the disease ceased. We landed six weeks afterwards at the Cape of Good Hope, a sound ship.”—Vol. ii. p. 204.

#### MEDICAL EFFICACY OF ANIMAL AND OTHER ORGANIC OILS.

No more efficacious addition has been made to our list of remedies, than cod-liver oil. Its utility has been amply confirmed in my own practice since I wrote specially on the subject in my *Clinical Medicine*; and its virtues are so great as to be almost incredible when we consider its apparently simple nature.

This fact should prevent us from being altogether incredulous when we hear of other organic oils and fats being used with advantage in certain diseases: thus, in South America many healing virtues are attributed to the oil extracted from the Condor: and in the United States, the back-woods-men are said to use the oil extracted from the rattle-snake, for the cure of many diseases. To these last I have to add the effects of a broth or decoction made from the common Ray (*Raia clavata*) which is used in the Highlands of Scotland for the cure of scurvy and rickets, and with considerable advantage. The remedy is also popular in Ireland, in the vicinity of Skerries. It is made by boiling down the fish in water until a broth results, strong enough to gelatinize on cooling. The patient is bathed in this gelatinous fluid three times a day, and the affected parts are rubbed with the luke-warm melted jelly frequently.

I knew an instance of a child, far gone in rickets, emaciated, with the joints enlarged, and all the symptoms of the disease well marked, who was cured by a tepid bath of sea-water every morning; and when the skin was dried after the bath, the spine

and swollen joints, with all the parts in the immediate vicinity, were well bathed and rubbed with a decoction of the Ray prepared as above.

A young lady whom I attended, and who laboured under some constitutional delicacy, was affected with weakness in her lower extremities, and pains of a wearisome nature in her back, thighs, and legs; she was cured by the same remedy, after various other means which I had used had proved totally inefficacious.

In Frazer's Magazine for November, 1850, there is an interesting paper, "Leaves from the Note-Book of a Naturalist," in which is cited a passage from Pliny, as translated in the quaint language of Philemon Holland. The passage is very remarkable, as proving how long the utility of animal oils, in scrofula, has been known. Pliny, speaking of turtles, observes:—"If their flesh be eaten, together with the broth in which they are sodden, it is held very good for to discusse the king's evil, and to dissipate or resolve the hardness of the swelled spleen."

The naturalist also quotes an old French author, as follows:—"Labat tells us that those who go to the turtle islands, to fish for the green and hawk's-bill turtles, live on the flesh of turtles *only* for three or four months, without bread, without cassava, with nothing, in short, but the fat and lean of the animals; and he declares that, whatever maladies these men may have when they set out upon this expedition, even if they should be affected with the most loathsome, they return perfectly cured."

#### THE THERAPEUTICAL POWERS OF ACONITE.

Although the medicinal properties of this plant have been long ago described by continental authors, yet we are much indebted to Professor Fleming (now of Queen's College, Cork) for the accurate observations and cases which form the basis of his treatise on its virtues, a treatise to which must be ascribed its general introduction into medical practice in Great Britain.



I still continue to find it useful in certain obstinate cases of neuralgia; while in other cases of this disease its effects have disappointed me: however, this is all that can be expected from any medicine which acts upon the nervous system. It is impossible that it could invariably produce beneficial effects, yet the practical physician will be satisfied if it exhibits its powers in a given proportion of cases.

Aconite failed to give relief in the case of a lady labouring under chronic lumbago and sciatica, although it was pushed as far as prudence would allow. Its failure in this case disappointed me much; but at the same time I may remark that there was something in this lady's malady which rendered it particularly intractable, and caused all the medicines that were employed to produce little or no good effect until, after many months, I tried strychnia internally, which proved a speedy and perfect cure.

In another case, in which the patient, a middle-aged gentleman of robust constitution, suffered from a cutaneous neuralgia affecting various parts of the skin at different times, and not sparing any part of the body, so as to render his life miserable during the paroxysm, the aconite likewise failed, as did all other remedies. The result was more encouraging in the following cases:

I attended, with Mr. Nicholls, of Dawson-street, an officer aged about sixty-five years, who long laboured under the effects of hereditary gout, and who sent for me during an excruciating gouty neuralgia, affecting the nerves on one side of his face. He was speedily and completely relieved by the tincture of aconite, applied locally.

I attended also, with Mr. Nicholls, a gentleman from Roscommon, who was attacked with rheumatic fever during a temporary residence in Nassau-street; in the latter part of the fever he was tortured by pains darting from the front to the back of the chest, or *vice versâ*, or else from one side to another, in fact these pains occupied successively nearly the whole ex-

tent of the diaphragmatic attachments In this case the aconite proved itself a most valuable auxiliary remedy; as it did likewise in a very similar case that I had in Harcourt-street, which I attended along with Surgeon Adams. In the latter instance it is necessary to remark, that the gentleman had been frequently cupped over the seat of the pains with relief; and that he was, at the time of taking the aconite, in a debilitated state; under these circumstances eight drops of the tincture, given in the morning, and repeated in four hours afterwards, seemed suddenly to check the pains; but it at the same time brought on indistinctness of vision, a failing of the pulse, and a diminution of general heat, which were for the moment very alarming symptoms, but yielded in a few hours to stimulants, such as brandy and wine. No bad effect remained; but the specific action of the medicine deterred us from having recourse to it again, when the diaphragmatic pain returned in two days, though with diminished violence.

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ART. II.—*Practical Observations on some Affections of the Male Urethra*. By SAMUEL G. WILMOT, M. D., F.R.C.S., Surgeon to Steevens' Hospital, Lecturer on Surgery in the Original School of Medicine, Peter-street, &c.

ALL practitioners, as well physicians as surgeons, are too apt to give their almost undivided attention to diseases palpable in their features, and manifest in their results as to treatment, while affections, perhaps, no less annoying to the mind and distressing to the body, though of small importance only, in a relative degree, are, owing to their obscurity, either altogether neglected, or, if considered, not studied with the same regard to accuracy. To this cause we may in a great measure attribute our failure in combating many of those symptoms which in our ignorance we designate “anomalous” or “equivocal;” and upon the same account it is that we feel so frequently obliged, in order to screen ourselves from discredit, to resort



to the specious excuse, that the malady has no real existence; and hypochondriasis is referred to as the origin and support of the patient's complaints.

Regarding the urethra as the seat of disease, all are fully familiar with the pathology, morbid consequences, and treatment of its leading affections; but there are many of its diseases most harassing to both patient and surgeon, which are generally neither recognized with precision, discriminated with accuracy, nor treated successfully.

A case of stricture or diseased prostate is at once treated in a scientific, definite, and effectual manner, because being acquainted with the exact nature of the morbid lesion, the practitioner can strike at the root of the evil; but how frequently do we find what may be termed the minor urethral complaints prescribed for without the least reflection, as to whether they are primary or merely sympathetic, or whether they be or be not connected with some particular vice or diathesis in the system.

We sometimes meet with cases which answer to the following description: a man complains that he has been annoyed for a long time with a constant discharge of watery matter resembling whey, from the urethra, and a tickling or hot sensation when he passes urine. He states that all the symptoms are heightened when he drinks spirits, has sexual intercourse, or exposes himself to wet, cold, and fatigue; and that frequently, without any assignable cause, he is seized with inflammation of the canal, which assumes all the characters of acute gonorrhœa. If we question the patient, he tells us either that he never had gonorrhœa, or if he had, that the interval between the complete cure of the latter, and the supervention of the symptoms now detailed, has been so long as to remove the least rational supposition, that the one could be the sequel of the other. When we examine the urethra, the first thing which attracts our attention is a pouting of the lips of the orifice, which, however, does not present a circular shape, as in

gonorrhœa, but appears flattened laterally, as if it had been tightly compressed between the fingers. If we expand the orifice, the mucous membrane, as far as can be seen, exhibits a highly vascular and granular condition, which can be compared to nothing better than to the palpebral conjunctiva in granular ophthalmia; and I believe that the same condition occupies the entire length of the canal, as far at least as the bulb. If we introduce a No. 8 bougie or catheter, we find that the patient experiences pain on its first entrance, and all along the passage, but particularly when it arrives at the bulb, where we in general become sensible of a soft spongy obstruction; a little pressure on the instrument, however, will make it surmount what appears to be a slight eminence.

Now I look upon this affection as essentially strumous, and it may be termed strumous urethritis. Though independent of gonorrhœa as its cause, this morbid affection is very frequently preceded by that specific complaint which glides gradually into it through the medium of gleet; whenever, therefore, we have a case of protracted gleet in a person of well-marked strumous disposition, we may apprehend its termination in the slow and obstinate disease just described.

When the case is allowed to progress, the bladder very frequently becomes engaged, its irritability is greatly increased, and the quantity of purulent deposit in the urine declares that the urethra alone cannot furnish it all. Whether the lining membrane of the bladder ever becomes degenerated in the same granular manner, I cannot say, not having had any autopsical opportunity of ascertaining the point; but that such may be the case appears a rational conjecture.

The urine I have generally found to be neutral; often, however, it is slightly acid, and sometimes faintly alkaline, and by the microscope more or less pus globules are always detected in it. The colour is usually of a slight milky hue which renders the appearance cloudy, and on the application of heat a small albuminous precipitate is very often thrown



down. The source of the albumen it is necessary, if possible, to know; it may arise merely from the admixture of pus with the urine; or it may owe its origin to the kidneys; for I believe that, after having been tormented for a long period with the urethral affection, these individuals die of renal disease. To diagnose its source we may introduce a catheter into the bladder, and make the urine thus procured the subject of the albuminous tests: by this means we avoid the presence of pus, so far as the urethra is concerned in its supply; but where the bladder itself is diseased it is evident that such a procedure is useless, since it cannot clear up the doubt as to the exact origin of the albumen. The subjects of this complaint, when it is of long standing, become pale and thin, and their countenance assumes a depressed, haggard aspect. I suspect that it is this disease which often lays the foundation of that rare form of stricture, the universal one.

The following is a well-marked case which I recently had under my care. The man, a baker by trade, aged 35, came to me complaining of the symptoms of urethritis. I perceived that the orifice presented the flattened pouting appearance above described, which led me to examine the interior of the urethra; and by means of one of those aural specula, which open with two curved blades of small size, I was able to see a considerable portion of the canal, and it exhibited precisely the characteristic appearance of granular eye-lids. This patient had also strumous disease of both testicles; there was a large tubercular deposit in the epididymis of each gland. He stated that he had gonorrhœa six years ago, of which he was completely cured; that he has been married for the last four or five years, and has had two children. When he first married, his left testicle only was affected; but within the last two years the other has become diseased, since which time he has nearly lost the sexual passion. He stated that in the discharge of his employment he was exposed much to fatigue and sudden changes of temperature, and that whenever he walked much

or drank whiskey, the next morning he perceived a yellow discharge from the urethra, and micturition was attended with pain and scalding. The prostate gland, examined per rectum, gave no indication of disease; but the urine (in the examination of which I was assisted by my friend Mr. Fleming) afforded the following results:—specific gravity, 1020; reaction, neutral; a slight opaque cloud thrown down by heat, which is not dispersed by the addition of a drop of nitric acid; pus globules visible by the microscope, but no crystals of any kind apparent.

The treatment I have found most useful for this complaint is the occasional introduction of a bougie; and I think it of advantage, if there be not too much irritation, to smear the instrument with some astringent ointment. In the case now detailed, and in another instance, I employed the acetate of lead ointment of the Pharmacopœia for this purpose, and I considered that it produced decided benefit. Where there is a slight obstruction at or about the bulb, as there sometimes is, it is clear that the instrument must be of great use; but even where such does not exist it is also serviceable. Patients will always tell us that the passage of a bougie, when gently performed, relieves the irritation. We may also employ injections of the sulphates of zinc, alum, or copper, or of nitrate of silver; but I think I have effected more good by employing the decoction of oak-bark, either plain or combined with alum; two grains of the latter to an ounce of the former. Should there be pain or much irritation, we may add a little opium.

It has often struck me that we might apply the solid sulphate of copper to the urethra in these cases, by means of an instrument somewhat on the principle of the *porte caustique*, and with much advantage.

While treating the disease locally we must not neglect constitutional remedies. At first, it is well to administer some mercury in alterative doses, either Plummer's pill or the iodide of mercury in minute quantities. Should the patient, however,



exhibit very marked scrofulous features, it is as well to commence at once with the iodide of iron. Whichever we employ, we should always combine it with extract of hemlock. I have found the combination of two grains of iodide of iron, and the same quantity of extract of hemlock, given three times daily for some time, productive of the happiest effect. We may afterwards administer the nitro-muriatic acid in decoction of bark or sarsaparilla. Sea-bathing, if the patient's health admit of it, should be regularly observed, and a generous system of diet ordered; everything also which increases the irritation, such as the use of ardent spirits, sexual connexion, and over-exercise, should be sedulously avoided. Where balsams and turpentine are persevered in, with the vain belief that the case is one of common gleet, the symptoms never fail to be aggravated.

We meet in practice with cases of *irritable urethra*, presenting features of very different character, connected with very opposite states of constitution, and acknowledging very dissimilar remote causes. Systematic writers give such a definition of irritable urethra as renders that term synonymous with incipient stricture; and in fact the irritable urethra, as described by Home, and the dilatable stricture of Bell, are identical affections. I think it better to expunge the latter term altogether, to designate the disease incipient stricture with morbid sensibility, and to restrict the former appellation to those cases quite unconnected with stricture.

A person complains of some scalding in making water, and of slight purulent discharge from the urethra, both of which are greatly aggravated by drinking wine or spirits, by sexual indulgence, or by over-exercise: the stream is usually somewhat diminished, and the frequency of calls to micturition increased. If we introduce a full-sized instrument it will pass freely into the bladder; and, should we experience any resistance, it is but a very slight one at the prostatic portion of the urethra. This, however, rarely increases, and, whether it be present or not,

there is always more or less exalted sensibility of that part, being in some instances very considerable. This affection is accompanied by a peculiarly sensitive condition of the nervous system, general debility, and dyspepsia; but in most instances the principal annoying consequence of the disease is frequent nocturnal emissions, and it is in general for these that we are consulted by the patient.

Now, spermatorrhœa may arise from two causes,—either from debility of the genital apparatus, the result of excessive venery, or most probably of that disgusting vice, onanism; or it may be the consequence of some inflammation or irritation in the urethra, particularly in its prostatic portion. Lallemand, who has written at length on the subject of spermatorrhœa, considers that some degree of chronic inflammation of the prostatic portion of the canal is almost always the cause of the distressing complaint, and refers the morbid condition of the urethra to previous gonorrhœa. No doubt, this last-named disease is frequently to be blamed as the originator of all the mischief; but we often meet with cases of spermatorrhœa in which it is evident that irritation of the prostatic portion of the urethra is the cause of the involuntary emissions, the patient never having had gonorrhœa. In such cases the spermatorrhœa may first exist, and after some time irritable urethra be superadded. A person from an early age has been addicted to malpractices, which sooner or later eventuate in constant involuntary emissions; this continual excitement of the prostatic portion of the urethra will, in process of time, lead to a high degree of irritation in that part, and, if the affection be not attended to, confirmed irritable urethra will become established: thus the latter is the effect, not the cause, of the spermatorrhœa, so that in accounting for the combination it is quite unnecessary to suppose, in every case, the pre-existence of gonorrhœa.

Patients who labour under irritable urethra and spermatorrhœa combined, are, of all individuals, the most wretched, as well in mind as in body, they become inapt for active occupa-



tion, grow desponding, and, in a few unhappy instances, fatuity gradually steals on: while their bodily powers become debilitated, there is great prostration of the physical energy, often frequent fainting, and the nervous system becomes liable to many obstinate affections, the most serious of which are epileptic fits. Oxaluria is also a most common complication.

The treatment of irritable urethra is essentially tonic; the preparations of iron and bark may be prescribed, but by far the most efficacious means are country air and sea-bathing. The local irritability is best allayed by the gentle introduction of a moderate-sized plaster or gum-elastic bougie, about once or twice a week; and, though there be not the least obstruction, the increased sensibility will gradually lessen: very often this procedure causes, on the first two or three occasions, a good deal of pain and increase of the irritation, but every subsequent employment of the instrument will be found to do good.

We frequently find practitioners who persist to treat irritable urethra as if they were under the impression that the case was gonorrhœa or gleet; and so confident are they of the correctness of their diagnosis, that if, from feelings of courtesy, they cannot impugn the patient's veracity when his statement is opposed to their belief, his assertion is tacitly discredited, and balsams and turpentine, cubebs and injections, are freely prescribed. Such treatment invariably aggravates the complaint.

When spermatorrhea complicates the case, and is the symptom which most urgently demands removal, I believe the best plan is to adopt Lallemand's advice, and apply the solid nitrate of silver to the prostatic part of the urethra. The object is merely to stimulate the membrane, and if we use the *porte caustique*, as modified by Lallemand, a most ingenious and elegant instrument, we shall effect the purpose without any danger.

I have at present under my care a gentleman aged twenty-five years, who has suffered for a long time from irritable urethra and spermatorrhea. He has been subject for the last

six years to nocturnal emissions; four years ago he contracted gonorrhœa, and ever since he has been troubled with irritable urethra, and this has rendered the spermatorrhea still more frequent. I exhausted every remedy in the Pharmacopœia calculated in any way to influence the affection, but all to no effect; at length I tried the nitrate of silver: I have applied it four times, always with an interval of four or five days between each application, and the improvement, so far, is manifest.

I have also found much benefit from making the patient dash the testicles, perineum, and penis every morning with cold water and vinegar; it acts as a powerful local sedative. The patient should be made to refrain from stimulants of all kinds; his diet should be nutritious, but free from heating condiments; he should sleep on a hard bed, and precautions should be taken to prevent his lying on his back: lastly, the exercise he takes should be only very moderate. If the testicles be painful and hang low, as they sometimes do, wearing a suspensory bandage will give much comfort. The mind should be occupied; but studies requiring much thought and application should be suspended for the time.

For the nervous affections which often accompany the complaint, the preparations of zinc seem to be the most effectual remedy. The valerianate of zinc, in doses of one grain with three of extract of valerian, in the form of pill, given three times daily, is a most beneficial agent when there is much mobility of the nervous system, but in cases that assume a more palpable form I prefer the oxide. We should commence with one grain three times in the twenty-four hours, and if necessary increase it to three.

Some time ago a young man consulted me for epileptic fits and general debility. He was very thin; his face was contracted, and presented rather a livid hue. Upon being questioned, he admitted that he had been subject to constant involuntary emissions, to which circumstance he attributed his complaint. He was in a miserably depressed state of mind. I



endeavoured to remove the cause, the spermatorrhœa; but though this condition was improved, the fits continued. I now placed him on the oxide of zinc, in doses of one grain three times a day, and the interval between the fits soon began to increase, and his general health to improve. I then pushed the dose to three grains, and after a little time sent him to the country: he returned almost well in six weeks. Where there is much debility we may combine quina with the zinc. The shower-bath constitutes a powerful remedy in these cases. I have been told by patients that if they omitted it for one week, all their nervous symptoms would return, and the nocturnal emissions become frequent. I have tried electricity, but not with any marked benefit. When oxalate of lime is present in the urine we should administer the nitro-muriatic acid; it may be given in decoction of sarsaparilla, or in the cold infusion of bark of the former Dublin Pharmacopœia.

The pure irritable urethra is sometimes symptomatic of hepatic or gastric derangement, in which case, of course, our remedies should be directed to the removal of that cause. A gentleman who had resided a long time in France, had an attack of acute hepatitis which left some chronic inflammation behind, evidenced by tenderness on pressure beneath the ribs on the right side, and pain in the right shoulder; there was also considerable derangement of the stomach and bowels. While labouring under these symptoms, irritability of the urethra came on, and he suffered great annoyance. The practitioner he consulted, without investigating the case, set it down as one of slight gonorrhœa, and prescribed for it accordingly; but the treatment aggravated both the primary lesion and its effect. After some time attention was turned to the hepatic affection, he was placed on small doses of blue pill and rhubarb, and the site of the liver was painted regularly with the compound tincture of iodine; afterwards he was ordered to take small doses of hydriodate of potash in sarsaparilla, and the fluid extract of dandelion. He soon began to amend, and the ure-

thral annoyance to abate; and after persevering in the above measures for some time he got perfectly well. Ever since, however, when his old complaint returns, he is apt to be seized with irritability of the urethra.

Different parts of the genital apparatus, particularly the testes, become sometimes the seat of neuralgic pains, which prove most obstinate and troublesome; but the most intractable case I ever witnessed was neuralgia referred to the course of the urethra in the perineum, between the scrotum and anus. The patient was a man aged 30, apparently in robust health. He stated that he had contracted gonorrhœa a few years ago, and attributed his present affection to that disease. He had not the least pain, scalding, or difficulty in passing urine, no discharge nor other evidence of urethral irritation, and a large catheter passed with the greatest facility. There was no prostatic affection, as far as could be ascertained by examination. The pain was constant, but subject to exacerbations, at which periods it sometimes became excessive, and he was rendered incapable of attending to his business. I prescribed iron and bark in full doses, and after some time every remedy I could think of; in addition I applied frequent blisters and painted the part with the strong tincture of iodine. The only application which seemed to afford relief was a belladonna plaster; it was shaped in such a way as to lie closely to the perineum. After attending me for a considerable period, he suddenly disappeared, dissatisfied, of course, that the affection had been in no degree removed.

The foregoing observations, crude and imperfect, are offered to the profession chiefly with the object of investing with some importance affections which are generally too little thought of by practitioners, and of pointing out that their treatment, when based on correct principles, will prove successful.



ART. III.—*Does Ergot of Rye act as a Poison on the Child in Utero?* By JOHN DENHAM, M. D., Ex-Assistant of the Lying-in Hospital, Lecturer on Midwifery in the Carmichael School of Medicine, &c.

THE varied and increasing use of ergot of rye in obstetric practice, and the dangers likely to arise from the indiscriminate and too frequent administration of it, together with the unhappy discrepancies that are met with in the accounts published respecting the influence it exerts upon man and other animals, have induced me to turn my attention to the subject for some time past. The result of that inquiry I now beg leave to lay before the profession.

The majority of practitioners concur in assigning energetic powers to ergot, while not a few have pronounced it inert and harmless. The late Dr. Hamilton, of Edinburgh, declared that it acted "in no other way than by influencing the imagination." When we bear in mind, however, that the learned doctor admits that he had only two opportunities in practice of giving it a fair trial, we may, I think, allow him a poet's license, and assign to his imaginings on this subject their proper value.

Accidental observation and direct experiment concur in showing that it acts as a direct poison on many classes of animals, while upon others it seems to exert no deleterious influence whatever; but in no case can we look upon it as a violent or active poison, as it requires drachms, and even ounces of it, to destroy small animals, such as rabbits and pigeons.

That it is a slow but certain poison we have abundant evidence from the experiments of Wright. Thus, in one case, he gave a terrier bitch fifty-six ounces of solid ergot in the space of seven weeks, at the end of which time she was reduced from thirteen pounds weight to seven and a-half. To a bull-terrier pup, only four months old, he gave in nine weeks twenty-

three ounces and a quarter of solid ergot. In the space of twelve weeks he gave to a large doe rabbit sixty-four ounces of solid ergot; at the end of the twelfth week she died; and, what is very remarkable, during the twelve weeks she brought forth young twice; six on the first occasion, all of them lively, of good size, and apparently in good health; at her second accouchement she gave birth to three young ones, two of which were dead, and not more than half grown; the third, alive when born, was somewhat larger, but it died in a few hours. Towards the close of this last period of gestation the poison had evidently begun to tell upon the rabbit; she looked ill, appeared to be drowsy and moping, and her hair became long, erect, and rough; and, what we would scarcely be prepared to expect, she exceeded her previous period of gestation by five days. That some animals are invulnerable to its poisonous effects we may fairly infer from the cases related by Block. In 1811 thirty sheep ate together nine pounds of ergot daily, for four weeks, without any ill effects. Again, twenty sheep consumed thirteen pounds and a-half of it daily, for two months, without injury. Thirty cows took together twenty-seven pounds daily, for three months, with impunity; and two fat cows took nine pounds of it daily, with no other obvious effect than that their milk gave a bad caseous cream, which made inferior butter. From these facts we may fairly infer that ruminant animals do not suffer from ergot like other animals.

Chapman, in speaking of the action of ergot on the gravid uterus of mammals, says, "It never fails in a short time to occasion abortion." We have also the testimony of Percy and Laurent for saying that a decoction of ergot injected into the veins of a cow caused the animal to calve speedily. But on the other hand, and in opposition to these statements, is the evidence of Chatard, Warner, and Villeneuve, who all failed in producing abortion by it; and to this view the experiments and the opinion of Wright unquestionably tend: but I shall again allude to these points. When given to women for the



purpose of exciting abortion, or bringing on premature labour, ergot has sometimes failed, yet there seems to be strong evidence to show that it frequently succeeds, and most practitioners in the present day appear to be satisfied, that in a large number of cases it has the power of originating the process of parturition: upon this point, however, I can offer no very decided opinion, as I have rarely seen it given during the period of utero-gestation with this intention. That it occasionally affects the cerebro-spinal system there cannot be a doubt, as we learn from the cases published some years ago by Dr. Maunsel in the London Medical Gazette, and also from those narrated by the late Dr. Cusack, in the fifth volume of the Dublin Hospital Reports. Weight and pain in the head, giddiness, delirium, dilatation of the pupils, and stupor, are the principal symptoms mentioned by these writers, as indicating the action of ergot on the brain.

In the Dublin Lying-in Hospital the use of ergot of rye is not confined to cases of difficult or lingering labour; it is sometimes administered for the purpose of hastening delivery where the life of the patient is in danger from hemorrhage during labour; not, however, in the first stage, but when the os is dilated, and the membranes ruptured. It is sometimes given with a view of hastening the expulsion of the placenta when retained from inertia uteri, and where hemorrhage occurs as the natural result of that sluggish state of the organ. And, lastly, it is given in the chronic wards of the institution, in cases of menorrhagia, amenorrhœa, and leucorrhœa, and also in hemorrhages during the early months of pregnancy, where abortion is inevitable. But I have not been fortunate enough to witness the happy effects ascribed to its use by some practitioners who are in the habit of giving it in the first stage of labour, for the purpose, I presume, of promoting dilatation of the os uteri. Neither have I seen it given in cases of placenta prævia, accidental hæmorrhage, or partial placental presentation, previously to the rupture of the membranes; nor in

puerperal convulsions, although several successful cases of its employment are on record. On what principle it can be recommended or administered in such cases I am wholly at a loss to understand.

The subject, however, that I wish more particularly to direct attention to, is not so much the influence exerted by ergot of rye upon the mother, as how, and to what extent, it affects the child in utero. Is it physiological or simply mechanical in its operation? Does it destroy the vital principle by acting directly and immediately as a poison, or have we any data that should lead us to believe that death may be produced by the increased and continuous uterine contractions induced by the ergot, and which must necessarily interfere with and even interrupt the placental circulation, while at the same time they bring an undue amount of pressure to bear upon the body of the child, to the undoubted injury of its vital functions?

If we consult authorities upon this subject, we find the greatest possible difference of opinion to exist. Some go so far as to deny that it exerts any injurious influence whatever upon the child, either mediately or immediately. Dr. F. H. Ramsbotham, Dr. Beatty, of this city, and Drs. Hardy and M'Clinck, all maintain that the poisonous effect of the ergot is extended from the mother to the child, as it would be if opium had been administered. Dr. Hosack and Dr. Meigs, of Philadelphia, support the opinion that death is produced by the violent contraction of the uterus, and the compression and convolution of the uterine vessels consequent thereon. Dr. Chapman strongly denies that it has any bad effect on the child. He states that in two hundred cases, which occurred in the practice of Drs. Dewees, James, and himself, the ergot was used without doing harm in any respect; and he adds, "no one here believes in the alleged deleterious influence of the article upon the foetus."

In Dr. Beatty's interesting paper upon this subject, which was published in the twenty-fifth volume of the former Se-



ries of this Journal, he says, at page 205 :—" It is, I believe, generally imagined (and I entertained the opinion myself until lately) that the death of the child is owing to the kind of action excited in the uterus by the ergot. Now although this cause contributes, no doubt, in some cases, to produce unfavourable effects upon the child, I am disposed to think it is not the only cause of fatal mischief in all; but that in some there is a noxious influence exerted on the nervous system of the infant, producing results of different degrees of intensity, and that these effects vary from the death of the infant to certain spasmodic affections of the muscular system after birth." "It appears to me," he again says, at page 209, " that the cases I am about to relate will go a great way towards the solution of this question, by the evidence they afford of a direct poisonous effect produced on the infant before delivery." At page 213 he states "that the distinguishing characteristics of poisoning by ergot in infants are, the general lividity of the surface, the unusual rigidity of the muscular system, producing the stiffened limbs and clenched hands in those infants in whom life was extinguished, and the remarkable kind of alternating spasm and palsy which supervened in those that were resuscitated."

Dr. Hardy, in his paper upon ergot, published in the twenty-seventh volume of the former Series of this Journal, also says:—" In numerous instances I have observed the foetal heart undergo all these changes where very little uterine action, and sometimes none whatever, followed the exhibition of ergot; on which account I am led to believe that the depressed state of the foetal circulation must arise not from uterine contractions, but from some deleterious influence exerted by the ergot." Its effect on the mother's pulse, he adds, corroborates this opinion. Drs. M'Clintock and Hardy, in their truly practical and valuable observations, appear to take the same view. Speaking of ergot in tedious labours, they remark, at page 84:—"It by no means follows as a consequence that the ergot will not act on the child because it does not act on the uterus, for we have seen

numerous instances where the child was unquestionably affected by it, although the uterus was wholly unaffected, or nearly so." And again, at page 95, they remark:—"The total number of tedious and difficult labours in this Report amounts to 259, 173 of which were delivered without any instrumental assistance. Of this number thirty got ergot to overcome inertia in the second stage of labour, and only ten out of the thirty children were born alive." "This furnishes strong proof," they say, "were any such required, of the deleterious influence of ergot upon the foetus, as in nearly every one of the above instances there was unequivocal evidence of the child's vitality when the ergot was given, and in the great majority of them delivery took place within two or three hours after the administration of the medicine."

I shall now make one or two observations, tending to show that the deadly influence of ergot, as a poison upon the child *in utero*, is not so fully established as the authors just quoted seem to think; I need scarcely add that I do so in no unfriendly feeling towards my esteemed and talented friends who have written upon the subject, but simply with the view of eliciting truth, and ascertaining how far my views upon this truly practical and important subject are correct. That ergot of rye is not an active or deadly poison to either man or beast we have ample proof in the details already given; indeed I am not aware of any case on record where it proved fatal to the human subject, even when given to a much greater extent than we are in the habit of administering it. I alluded to five cases published by Drs. Maunsell and Cusack, where it produced symptoms of narcotism; these, with one solitary case given by Dr. Hardy, in his paper upon ergot, in which delirium came on during its action, are the only cases that I am aware of where there appeared anything like serious or continued injury to the mother from the use of this medical agent; and in these the symptoms appear to me to have been the result of some peculiar idiosyncrasy in the individuals, rather than the product of any



fixed or specific action induced by, and consequent upon its introduction into the system. The quantity absorbed by the mother in the short space of time between the giving of an ordinary dose of the medicine and its apparent influence upon the system (it sometimes acts in seven minutes) must be very small indeed, and not much calculated, I should say, to exert a deleterious influence, particularly when we remember that there is no vascular communication whatever between the offspring and the mother.

Does the ergot act by absorption, or through the agency of the nervous system, when given in labour cases?

In the first case given by Dr. Hardy, in his paper upon ergot, he states:—"At ten minutes to ten o'clock, two hours and a half from administering the ergot, the child, a male, was expelled; its heart immediately after birth beat 56 in the minute, in about one minute it rose to 76; in twenty minutes, when animation was restored, the number of pulsations amounted to 136." Now if this child had been really ergotized, would the poisonous effects have passed away so rapidly, or could it have been so easily resuscitated? May we not with more propriety attribute the effect produced to the interruption of the circulation and the probable congestion of the brain, produced by the severe and continued pressure of the ergotized uterus upon the child in the last efforts of expulsion. In the second case of the same report, where the patient had taken two doses of ergot, he states: "Pains not so frequent; pulse 96, full; foetal heart, 128; sometimes down to 88, and not so distinct." Here again I would look upon the change in the pulse as being produced by the contractions of the uterus, rather than as the result of any poisonous influence. The proportion of deaths recorded by Doctors M'Clintock and Hardy (already alluded to), where ergot had been given, is unquestionably great—ten children only out of thirty being born alive. But may we not fairly surmise that death would have occurred in many of these

cases, even if ergot had not been given, although, perhaps, not at so early a period. I am the more impressed with this opinion, as I find in their truly practical and candid Report, mention of several cases of tedious labour where ergot had not been administered, and in which the children were still-born, although the foetal heart had been heard a short time previously to delivery. Thus, in case No. 39 they state:—"A very short time before birth the foetal heart was audible, nevertheless the child was still-born, and could not be animated." In case No. 98 they say:—"Delivery was effected by the natural efforts at 4, P.M., the child, a boy, was born dead, notwithstanding that the pulsations of its heart had been heard at two o'clock in the day." And in case No. 211 attention is directed to the important fact of the child's being dead born, though its vitality shortly before the patient got the bath had been satisfactorily ascertained.

These, and many similar cases on record, clearly prove that death sometimes takes place when ergot has not been given, even where we have little reason to apprehend such a result.

Dr. Beatty in his paper details six cases of a very unusual and highly interesting character. The children (he says) were all born apparently dead, blue in colour, stiff and insensible; three of them were with difficulty resuscitated, and two out of the three were afterwards attacked with convulsions. The sixth and last case mentioned he did not see until it was three years old, when it was labouring under a very remarkable spasmodic disease which had continued from its birth: he ascertained from the mother that her labour had been long and tedious, and that she had got ergot of rye to quicken the pains. Dr. Beatty considers that the symptoms in these cases were the result of poisoning by ergot; and he endeavours, as I have already stated, to show by them, and by a reference to the experiments of Wright, that ergot really acts as a poison on the child in utero. It is not my intention at present to discuss the merits of this highly interesting paper; I wish merely to re-



mark that the number of cases is quite too few to found any data upon in a question of so much importance, and upon which there is such a diversity of opinion. In Dr. Hardy's paper we have the results of forty-eight ergot cases, in thirty-four of which the children were dead born; in many of the cases the ergot was administered two and three hours before delivery, and in some four or five hours, yet in none of them did he witness the symptoms described by Dr. Beatty; at least he makes no mention of having done so, and we may reasonably infer that so diligent an observer would not have passed over appearances so unusual and remarkable. Again, in the thirty cases recorded by Doctors M'Clintock and Hardy, twenty of which were fatal, there is no mention made of any such symptoms as the result of the use of ergot; and I am sure that Dr. Beatty, in common with most physicians in extensive practice, must often have met with nervous and spasmodic affections in children, similar to those mentioned as affecting his sixth and last case, and where ergot had not been used; and further, I should think that he must have seen children born after the use of ergot, pale and flaccid, while in other instances they are often blue and congested, even where ergot has not been given.

I cannot omit noticing as bearing upon this subject a very able paper: "On impending Dissolution and Nervous Affections in young Infants," published in the twenty-fifth volume of the former series of this Journal, by Dr. Doherty, now Professor of Midwifery in Queen's College, Galway. He there gives a detail of upwards of twenty cases, in all of which there was present very soon after birth a tendency, more or less, to convulsions, spasmodic twitchings, or paralysis; many of the children were born cold, livid, and congested, while some were pale and flaccid: he does not mention, however, the rigid state of the muscles described by Dr. Beatty as having been present in any of them. In most of the cases the labours were short and easy, and in none of them had ergot been given.

I shall now allude briefly to the opinions of those who take

a different view of the subject, and who do not believe that ergot of rye acts as a poison, properly so called, while at the same time they fully admit that it frequently causes the death of the child. "The ergot," says Dr. Hosack, "has been called in some of the books from its effects in hastening labour, the *pulvis ad partum*; as it regards the child it may with almost equal truth be denominated the *pulvis ad mortem*, for I believe its operation, when sufficient to expel the child in cases where nature is alone unequal to the task, is to produce so violent a contraction of the womb and consequent convulsion and compression of the uterine vessels as very much to impede, if not totally to interrupt the circulation between the mother and child."

Dr. Meigs of Philadelphia, in his valuable work on midwifery, in speaking of ergot, says:—"A labour is effected by the contractions of the muscular fibres of the womb, aided by that of the abdominal muscles. If all the powers employed in a labour could be accumulated in a single pain, lasting as long as all the natural pains do, no woman probably could escape with life from so great an agony, except that small number who are met with, and whose organs, happily for them, make no resistance, but open spontaneously, like a door, to let the *foetus* pass out. By a beneficent law of the economy the pains of labour are short, not lasting more than thirty or forty seconds in general, and returning once in three or six minutes. Under such pains or contractions, however powerful, the *foetus* is safe; for as soon as the contraction is over it lies in the womb free from pressure, and the placenta, which during the contraction had been violently compressed betwixt the womb on which it lies and the child within the cavity,—that placenta, I say, recovers its circulation, and continues during the absence of the pain to perform all the bronchial offices which belong to it. But," he continues, "if an ergotic pain is produced to last thirty minutes, in a case where the placenta is on the *fundus uteri*, and to be jammed for thirty minutes against the child's breech



without an instant of relaxation, who can doubt that its circulation is either wholly or nearly abolished; and that when the child emerges at last from the mother's womb it will emerge quite dead or in a profound asphyxia from the long suppression of its placental circulation? Multitudes of children are born dead from this very cause, by the imprudent exhibition of a medicine which as certainly excites a spasm of the womb as *nux vomica* does that of the other muscles of the body. For my own part," he adds, "I could say that I scarcely give ergot as an expulsive agent; I chiefly employ it at the moment or just before the birth of the child, in order to secure, if possible, a permanent and good contraction of the womb after labour in women who are known in their preceding labours to have been subject to alarming hemorrhage."

The last authority that I shall quote is Mr. Wright, whose very able and elaborate inquiry into the physiological action of ergot, was published in the fifty-second and fifty-third volumes of the *Edinburgh Medical and Surgical Journal*. It is somewhat singular that Dr. Beatty in his paper on ergot quotes Mr. Wright, and gives some of his experiments in support of his own view of the question, while to me, at least, the great majority of the experiments appear to lead to an opposite conclusion. The author's own sentiments will, I think, be found to coincide with this statement; after mentioning one or two of his experiments I will give his opinion upon the subject in his own words:—"I administered to a rabbit the day after its impregnation three drachms of ergoted rye, and repeated it daily until the period of gestation had expired, and the young ones were to all appearance unaffected by the drug." In the next experiment he gave a rabbit one ounce daily in three separate doses; at the common period she brought forth six little ones, two of which were dead, and no doubt recently; four were alive, but they were very meagre, and died on the following day. In his thirty-fourth experiment he gave a sow that was seven weeks pregnant one ounce and a-half of ergoted

rye, but no symptom of abortion followed, and at the usual time she brought forth a fine litter of young ones, all of which lived and grew well. In experiment No. 35, a spaniel bitch, a few days before pupping, took half an ounce of ergot; there were no signs of abortion, and at the end of five days she had six young ones, two of which were dead. In his forty-fourth experiment a spaniel bitch, one or two days before pupping, was given three drachms of ergot, which produced no sensible effect; in half an hour afterwards he administered half an ounce, and it proved equally inefficient; in fifteen minutes after the last dose the animal was stupified with carbonic acid gas, and the abdomen then opened and the uterus exposed. It was found to be perfectly still, except when moved by the young ones, which were yet alive in its cavity. In two other experiments he injected a solution of ergot into the jugular veins of two bitches in pup, which produced symptoms of poisoning, and the animals died in two hours; all the puppies in both cases were found dead. These highly interesting experiments require no comment from me, and I shall therefore conclude this part of the subject by giving Mr. Wright's opinion on ergot in his own words:—"I have never seen a case justifying the conclusion that mischief has followed the cautious employment of ergot; nor should I, from my own experience, consider it a medicine the exhibition of which, in a judicious manner, would be at all likely to injure either mother or offspring. Its tendency to injure the child, when given during the parturient stage only, I can scarcely believe, unless the impression be mechanical, and the foetus be hurt from the contractions of the uterus upon it; or, from a disproportion between the external parts and the foetus, the head suffers from being impacted in the pelvis. But if freely given for some time prior to the period of delivery, I am fully inclined to the opinion that it may, by deteriorating the health of the parent, so communicate its influence to the offspring as actually to destroy its life, or materially to reduce it in strength or soundness."



I shall now briefly mention a few cases illustrative of the opinion just quoted; they all occurred in the Dublin Lying-in Hospital, and were the cause of my first directing my attention particularly to this subject.

CASE I.—Sarah Parkes, aged 39, first pregnancy; labour tedious, from inertia and over-distention. Ergot was administered in the usual way, and with the desired effect of increasing the pains. The child was born alive, one hour and forty minutes after the ergot had been given; it was now discovered that there was a second child presenting by a foot and the breech; it was born alive and well in twenty minutes, exactly two hours after the ergot had been given.

CASE II.—Ellen Hughes, first pregnancy; also a twin case, and tedious from the same causes. Three doses of ergot were given in the usual way, and at the usual intervals; but although there was increased uterine action, the labour was not completed; she was therefore put under the influence of chloroform, and delivered of both children by the forceps; an interval of one hour having elapsed between the birth of the first and second child, both of which were strong and vigorous.

CASE III.—Mary Reilly, aged 36, admitted into the chronic ward No. 13, being recommended by a practitioner of eminence, who looked upon her case as an interesting one of hydatids in the uterus, circumstances rendering it very improbable that she could be pregnant. On her admission, there was some trifling hemorrhage, which increased so much on the following day that she was put upon scruple doses of ergot every third hour. After the second or third dose she complained of severe pain in the abdomen, so severe that I was sent for immediately. On examining the seat of pain, I was so much struck with the stony hardness of the abdomen, during the pain, as to induce me to make a vaginal examination, when, to my surprise, I found the os somewhat dilated, and a child *in utero*, with a vertex presentation. In about eight hours from the time

of taking the first dose of the ergot she gave birth to a six months' living child, which died, however, on the following day.

CASE IV.—Mary Doyne, aged 34, sixth pregnancy, sent into hospital on 28th February, 1848. It was stated by the physician who recommended her for admission that she had been thirty-six hours in labour, and had taken four doses of ergot, with half a drachm in each dose, which induced considerable increase of pain, but without any advance in the labour; as it therefore seemed likely to turn out a bad case, she was sent to hospital. On examination, we were not a little surprised to find the os uteri fully dilated, but the membranes unbroken; they were ruptured with some difficulty (being unusually strong), and in three hours from the time of admission she was delivered of a fine healthy boy, who presented not the slightest evidence of the action of any poisonous agent.

CASE V.—Mary Fox, aged 34, first pregnancy. Labour commenced at 10 o'clock, P.M., March 13th, 1849. The os uteri dilated slowly till 9 o'clock, P.M., on the following day, when it was fully dilated, with the exception of the anterior lip, which had not quite gone up. The head descended very slowly, with pains which continued during the night and nearly all the next day, although a full anodyne had been given. At 7 o'clock, P.M., March 15th, it was found that the head had made but little advance; the scalp tumour was increased in size; the mother's pulse, 96; foetal heart, 148. Half a drachm of ergot was given to her at half-past 7 o'clock; at 8 o'clock the dose was increased to forty-five grains, which was again repeated twenty minutes after 8, with the effect of increasing the frequency of the pains; so much so, that at half-past 8 the pains were without any intermission. The patient seemed to suffer much, but there was no advance in the head. At 9 o'clock she was put under chloroform, and delivered of a male child, with the forceps, but not without some difficulty.



The child was born alive, and did well, with the exception of an attack of inflammation of the eyes, which delayed its removal from the hospital for some time.

The above are a few of the cases which from time to time have occurred to disturb my belief in, and create a doubt in my mind as to the poisonous influence of ergot of rye. I am at present engaged with some experiments, which I hope to lay before the profession, with additional observations, at a future period.

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ART. IV.—*On the Use of Issues and the Application of Caustics in the Treatment of various Diseases ; with Cases.* By BENJAMIN G. DARLEY, M.D., Physician to Coolock Dispensary.

THE efficacy of issues, in various diseases, has long been well known and acknowledged by medical practitioners, especially in affections of the brain, eyes, bones, &c.; but my attention was first more immediately directed to their use by the perusal of a very interesting paper, by Dr. Henry Kennedy, published in the First Series of this Journal. In it he speaks of the applicability of this remedy in cases of cancer and ovarian dropsy, but states that he had not seen it tried in these diseases. Having had a case of a tumour in the breast under my care, which from good reason I suspected to be scirrhus, though in an incipient stage, I recommended the insertion of an issue in the arm; and from the time of its being established, now a period of five years, the tumour has not only not increased in size, but all pain and uneasiness have ceased; and the lady has lately informed me that, whenever the discharge is small in quantity, or the issue at all suffered to dry up, she always finds the stiffness and uneasiness to return in the arm and breast. This appears to me to be a most interesting and valuable fact, and very important, as suggesting a means of treating a disease so intractable as cancer; especially when the faith of surgeons in amputation of the breast is so much shaken. The report of the case is as follows:

Miss —— consulted me on the 10th of October, 1845, on account of a tumour in her left breast. She belongs to a family many of whom have had cancer; her sister, aunt, and cousin having died of this disease. She has also an enlarged ovary for the last two years. She first felt the tumour in the breast about two years ago, but did not mind it, as it gave her no annoyance until lately. She feels at present as if her chest was tightened with a cord, especially when she stretches her arm, or engages in gardening, of which she is very fond. She is thirty-eight years of age, her general health good, catamenia rather frequent. On examination, the tumour was found to be situated on the inner side of the left breast; it was not connected with the gland, but to the inside of it; its shape was flat, and longer from above downwards; not very moveable, but did not appear to be attached to any of the subjacent parts. There are a few warty-like excrescences scattered over the skin of the breast (these latter, in my opinion, frequently accompany cancer); and she told me that her sister, on whom she had a long attendance, had the same little warty tumours. She was ordered a mercurial plaster, to be applied over the tumour, to take hydriodate of potash, to have an issue established in her left arm, and to avoid exertion.

The ovarian tumour, which is referred to above, has also been in abeyance since the issue was inserted; how far this is owing to it, I am not prepared to say; nor could I pronounce it positively to be of a scirrhus nature. It is harder to the feel, and not so fluctuating as dropsy of the ovary generally is; it very probably does contain some water, but, from the diathesis of the patient, its cancerous nature may also be suspected. I shall now contrast this case with another, of genuine ovarian dropsy.

July 19, 1842. I was asked to visit Miss O., aged 30. I had attended this lady on a previous occasion, about four years before the above date, when she had an attack of inflammation of the appendages of the uterus. This disease was induced by



great mental distress. I refer to this attack, as it is very probable that the foundation of the present ailment was laid at that time. She is at present suffering from an enlarged state of the abdomen, which has been gradually increasing for the last two or three years. She has been lately in England, where she was treated for disease of the liver and dropsy. Her general health is good, and the catamenia regular. She complains of pains in her back and loins; her legs are slightly œdematous, and there is a large tumour occupying the hypogastric and iliac regions, and reaching as far as the umbilical and lower part of the epigastric region; it is firm and elastic, and slightly fluctuating. The liver has no connexion with the tumour, for, on passing my fingers beneath the ribs, I find that the tumour is below the hand. She says that it originally began on the left side.

The treatment was at first directed to removing some dyspeptic symptoms she complained of; general directions being given as to diet, exercise, &c. She was afterwards given hydriodate of potash. Had I had this case under my care lately, I should certainly have tried the effects of an issue. Some time after the above date, the tumour, becoming enlarged, caused much inconvenience, by pressing on the bladder. She was then placed under the care of another medical man, who tapped her; peritonitis supervened, and she died in three days afterwards.

This case, together with others that have terminated unfavourably, shows that the operation of tapping, in ovarian dropsy, is attended with much danger. There is another mode of performing the operation, which, I think, would be attended with less danger, viz., puncturing the cyst, so as to allow of the escape of the fluid into the general cavity of the abdomen, from which I should expect it to be taken up by the absorbents. The operation might be performed with a cataract-needle. We have an operation similar to this proposed in cases of hydrocele, and which I have performed myself with perfect success: inserting a cataract-needle into the hydrocele sac, and allowing

the fluid to escape into the areolar membrane, from which it is quickly absorbed. In the above case the cause of the peritonitis was the admission of air into the cavity of the abdomen, a result which would not be so likely to follow the mere admission of the fluid of ovarian dropsy into the same cavity. This mode of operating gets some encouragement from a case which occurred some time since in Dublin, where the cyst of an ovarian dropsy was burst by an accident, and the fluid was absorbed without any unpleasant consequence.

The efficacy of issues in apoplexy has long obtained. In a case lately under my care, I had an issue inserted in the arm after the first attack. Not long after convalescence I was again sent for, the gentleman having had a second attack. I certainly felt much satisfaction on inquiring, to hear that he had let the issue dry up, having, as he said, found it rather troublesome to dress, and that it was to his having done so the return of the disease was ascribed.

A gardener in my neighbourhood was labouring under epistaxis of a most severe form, on one occasion bringing his life into imminent danger. In this case I had an issue established in the arm, and from that time to the present, now upwards of six years, he has had no return of bleeding from the nose.

I have a lady at present under my care affected with chronic catarrh, with profuse expectoration; an issue has lately been put in her arm, and already the cough and expectoration have begun to decrease.

I should state that the method I generally employ of establishing issues in such cases as the above, is as follows:—I first apply a common blister of the desired size and when the vesicle forms, I remove the cuticle; this is then dressed every morning with a piece of Albespeyres' plasters, No. 2 or 3, and covered with lint and adhesive plaster, which keeps up a sufficient discharge. This may be called a perpetual blister, which to many ears is not so offensive as the term "issue."



In the diseases now mentioned, the issues are what may be called *permanent*. There is another class of affections where they may be used with advantage as a *temporary* means of relief; I refer to chronic tumours and chronic abscesses, which occur in different parts of the body:—for instance, in that form of constitutional or sympathetic enlargement of the glands of the groin, so frequently met with in young men, which is not the consequence of the venereal virus, but rather the effect of a weakened and cachectic state of the constitution. This tumour is very indolent in its nature, a long time elapsing before suppuration is established, and resolution is not a common termination. Now, the best method of treating such a tumour is, in the very early stage to make a tolerably sized eschar with the caustic potash, and to keep a small poultice over it; and the tumour, which prevents the patient making use of any exertion, will be found to have disappeared when the eschar separates.

Allied to this is another tumour often met with, and which appears in the axillæ of young persons. A young man applies for advice, and from his pale, washy appearance, and the manner he carries the affected arm, his disease may at once be known; he has the arm either in a sling or supported by his other hand, and the shoulder depressed and pushed forward; and there is much anxiety and suffering depicted in his countenance. If this be treated in the common way we shall have to wait a long time before it suppurates; and if it be then opened a small quantity only of thick pus escapes; the opening will soon close and the abscess point in another direction, leaving sinuses which are very tedious in healing. I have been for some time in the habit of treating such tumours in the same manner, viz, making a small eschar with the caustic potash in the very beginning, when they present a hard, indolent tumour. These latter must not be mistaken for the acute abscess, which is frequently met with in this situation, and which is easily treated by incision.

There is another class of affections for the cure of which various caustics are used, to which I wish next to call attention. I refer to those cases of *nævi* and small varices, which in infants are generally congenital, and which we also meet in children from the ages of 6 to 14 or 15. We are often called upon to give our opinion as to these little tumours. In females, when they appear on the face, their most general seat, they are a source of great anxiety to parents, not merely from their appearance, which is often very remarkable, but from the dread of their enlarging and being followed by unpleasant consequences. As to the latter, I have observed that, when they appear in growing up children, they do not increase to any great size, nor will they burst and bleed, as some species of aneurismal varices do; however, they are unsightly in their appearance, and consequently the judicious surgeon must be prepared to remove them when called upon. Now, I intend to state merely what I have myself seen in regard to these tumours, and to propose a very simple and safe method of removing those met with in growing up children.

And first, with regard to infants: the head is very frequently their seat; so are the back and the abdomen; they are often flat, and embrace a considerable portion of skin, which is of a purplish colour, with innumerable vessels, filled with blood, running through it. The blood can be squeezed out by pressure, but returns again when the pressure is taken off. I have seen one such as this occupying a considerable space round the umbilicus. Another kind is round and elevated, varying from the size of a small nut to that of a large cherry or walnut; this, from the congeries of contained vessels, gives to the touch the well-known wormy feel. One of the best methods of removing these is by passing threads steeped in a solution of sulphate of copper or of some other caustic astringent through the tumour. I remember one remarkable case of this species being brought to me; the tumour was the size of a moderate Spanish nut, and situated on the head of a child of a few months old.



I told the mother that she ought to have it removed by a slight operation, and that if neglected, it would surely end unfavourably; she told me afterwards that her husband would not allow of any operation. Some months afterwards I met this woman; having previously heard that "the child was cured," I asked to see its head. The tumour was perfectly gone, and the part, though slightly marked, was as flat and smooth as the rest of the skin. After some difficulty I got her to acknowledge that "a charm" had been performed; the charm was this: the child was brought to a house where a man had recently died, and the dead man's hand was rubbed a certain number of times upon the tumour, and after this the tumour gradually disappeared. I did not attempt, as it would have been a difficult undertaking, to persuade the mother that this was not the cause of cure. I mention it, however, partly to show the tendency these tumours have to contract and disappear.

The forms of these tumours which we frequently meet with are situated on the face of young persons; they vary from the size of a pin's point to that of a grain of barley. They are of two kinds, one a small, round, red, isolated tumour, which, when examined through a lens, shows a congeries of vessels running in a tortuous manner, and enveloped in a little cyst; the other, a small tumour, with a number of little vessels running in a stellated manner to it, as to a common centre. The blood can easily be emptied by pressure out of these little vessels.

Mrs. G—— consulted me about her little girl, a child of seven years old, who had one of these small varicose tumours under the left eye; the tumour itself is not larger than the head of a pin, but there is a lash of small vessels running in a stellated form to it, so as to give it a very remarkable appearance. The mother is very desirous to have it removed, as she thinks it is increasing in size. The operation was performed thus. I first, with a lancet, made a free opening through the centre of the tumour; all the blood in the small

vessels, as well as that in the tumour, immediately flowed out. I then, with a pencil of nitrate of silver, cauterized the exposed surface of the tumour strongly, holding the caustic in contact with the tumour for some time. A superficial black eschar was formed, which separated in the course of a week, when the tumour, and all appearance of the small blood-vessels, were gone; and in a very short time there was not only not the slightest depression left, but not even a mark to be seen. This mode of performing the operation is both safe and expeditious; it does not leave the deep pit I have seen after the operation with caustic potash, as used by some surgeons; and the application of the lunar caustic by itself, without the incision, frequently fails; or, if it succeeds, it is after a great many applications. It has been proposed to insert an acid into these little tumours, by means of capillary tubes, with the view of effecting a cure. I have not seen this latter operation tried; but I shall be satisfied if this *proposed method* of mine will do away with that barbarous plan of taking a piece of flesh out of such an exposed situation as the face, which the operation with the caustic potash inevitably does, and which produces an unpleasant reminiscence of the surgeon and his operation every time that the pit which it has left is observed.

ART. V.—*Contributions to the Treatment of Uterine Diseases*<sup>a</sup>.

By W. F. MONTGOMERY, A. M., M. D., M. R. I. A., Professor of Midwifery, &c., to the King and Queen's College of Physicians in Ireland.

I.—INTRA-UTERINE POLYPUS, OF A LARGE SIZE, SUCCESSFULLY OPERATED ON.

ON the 27th March, of 1850, I was urgently requested to visit a lady at Black-rock, who was said to be suffering such intense pain that her friends thought she could not survive if relief

<sup>a</sup> These cases were read before the Pathological Society of Dublin.



were not speedily obtained. On my arrival there, I found her to be about forty years of age, unmarried, and in violent agony, almost frantic with her sufferings, which recurred periodically, and resembled labour pain; she was quite blanched, and partially œdematous; and had been ill, her friends said, from time to time, for between four and five years, during which she had occasional pain, and leucorrhœal and sanguineous discharges from the uterus to a large amount.

On examination, which she consented to with great reluctance, I found the pains were produced by regular and strong contractile efforts of the uterus, the mouth of which was open to the size of a shilling, with very firm margins, and becoming very tense during each pain. Immediately within it I could distinctly feel a round tumour, which was pressed strongly into the circle of the os by every pain; in fact there was within the cavity of the uterus a polypus of considerable size, which the organ was endeavouring to expel, by efforts like those of ordinary labour. There was a tumour in the abdomen inclining towards the right side, and reaching nearly as high as the umbilicus.

She was suffering so severely, and was so exhausted by the pain, that I thought it necessary to give her a cordial and an opiate, from which she derived immediate relief; the uterine efforts ceased, the polypus receded, and the os uteri gradually closed after a few days.

She was then given tonics, under which her health improved surprisingly, and no further change of importance occurred until

May 27th, when, after taking a walk, severe pain again came on, with hemorrhage, and lasted three days; in consequence of which I saw her again on

May 30th, when I found the os uteri, which had been very rigid and unyielding two months before, much more open, thinner, and so relaxed as to allow me to pass my finger freely

into the uterus and round the tumour, which appeared to me to have a broad and very firm attachment.

June 15th, she is looking wonderfully better, but had a sharp attack of pain and hemorrhage on the 10th, which lasted several hours.

Under such circumstances, with frequently repeated and severe paroxysms of pain, and with large discharges of an exhausting character, I reflected often and anxiously on what I ought to do. I felt it was highly desirable that the tumour should be, *if practicable*, removed with the least possible delay; lest the patient should sink under the exhaustion produced by severe pain and hemorrhage. But how was its removal to be accomplished? There were, 1st, a very contracted vagina; 2nd, an os uteri only partially open; 3rd, a large tumour within it, with (4th), as far as I could judge, a very broad and firm attachment.

Then, by what means might the descent of the tumour be promoted or effected?

1. Ergot of rye might be given to aid the expulsive efforts of the uterus.

2. The polypus might be drawn down by force with hook forceps.

3. An attempt might be made to crush the substance of the tumour by a strong forceps.

4. There was the alternative of leaving it to time.

I greatly doubted that the action of ergot, or the attempt to pull the polypus down, would succeed; and if either did, I thought it almost certain that, from the extent and firmness of the attachment, its descent, *so produced*, would almost inevitably have brought down with it the fundus uteri; and thus inversion of the organ be superadded to the already existing formidable disease.

The attempt to crush and break up the substance of the tumour I regarded as equally objectionable: for, first, it would



have been very difficult to make, on account of the narrow vagina and only partially opened os; secondly, the firmness of the tumour was such as would render the attempt to break it down very likely to fail; and, thirdly, in doing so I thought it highly probable that large vessels would be opened, and a dangerous hemorrhage produced.

I therefore rejected all these plans (which, under suitable circumstances, have been adopted with success), and considering that, as yet, the patient's health was not deteriorating, but improving, and her patience and fortitude unimpaired, I decided on adopting the policy of Fabius, "*vincere cunctando*," and I had afterwards great reason to rejoice that I came to this decision.

In July she left town for three weeks; on the 15th of that month, she had a very severe attack of pain of an expulsive kind, with great flooding; and when I examined her on the 24th, the large end of the polypus had fairly cleared the os uteri, and I advised her coming to town to have the operation for its removal performed.

I next saw her on August 2nd, and on the 9th I passed a ligature round the neck of the polypus, fully three inches within the os uteri, by means of Niessen's double canula, and more than six inches of ligature were taken up in encircling the attachment of the tumour. On the

11th symptoms of putrefaction were perceptible, and continued to increase. On the

14th the ligature appeared to be drawn home, and on twisting the canula it broke, but the polypus would not come away, though the amount of attachment remaining undivided could not have been more than a quarter of an inch in thickness.

The discharge now became horribly offensive, the pulse very quick, and the stomach irritable, so that I began to be very anxious about the result, and to fear that it would be unfortunate; yet the patient never lost courage, but maintained

the most complete composure and unshaken fortitude throughout; took food freely, and slept well, never for one moment doubting, as she afterwards assured me, that she would ultimately recover, as I had promised her. And thus passed over the 15th, 16th, and 17th; each day I tried to draw the polypus down, but it seemed to be firmly grasped by the uterus, and was quite immoveable, so that no force of traction that I could safely exert was sufficient to bring it away until the 18th, that is, the ninth day from the application of the ligature, when, greatly to my satisfaction<sup>a</sup>, I succeeded in extracting it; from which moment the lady never had an unpleasant symptom.

The tumour, when it came away, was greatly decomposed, softened, and consequently reduced in size, portions of it having also been torn and cut away in the attempts to get it down; but still it was of considerable bulk, measuring about five inches in length and three in breadth.

As soon as the polypus was removed I found that the tumour in the abdomen became suddenly greatly reduced in size, and in a few days was no longer to be felt.

The lady's recovery was rapid and uninterrupted; she was in the drawing-room in four days, and left town on the 28th, ten days after the extraction of the polypus: and since her return to the country, I have been informed by her brother that she is in the enjoyment of perfect health.

## II.—HYPERTROPHY OF THE ANTERIOR LIP OF THE OS UTERI, REMOVED BY OPERATION.

I was requested to see the patient, whose case is here referred to, with the late Dr. Creighton, in the winter of 1848. She was about thirty-five years of age, had borne children, and her general health was stated to have been perfectly good;

<sup>a</sup> I beg to refer the reader to some observations of mine on the danger of allowing a large polypus to remain in the vagina, in order that it may soften and diminish, and so be more easily removed, in a paper on uterine polypi, &c., in this Journal, vol. ii. N. S. p. 54, August, 1846.



but she had latterly been constantly complaining of symptoms of uterine disturbance, which caused her great distress and uneasiness: she had pain in the back, with bearing down, and muco-purulent discharge. In short, her symptoms seemed to point to the existence of ulceration of the cervix uteri, to determine which, Dr. Creighton had made the requisite examination; and found that it was as he suspected; but that there was, in addition, considerable enlargement and projection of the anterior lip of the os uteri, which he at first expected would have disappeared under the application of caustic and other measures necessary for the treatment of the ulceration.

This, however, did not take place; and although the ulceration was improved, the distress experienced by the patient continued to increase, and he was anxious to have further advice, in consequence of which he requested me to visit her with him.

She was now complaining of constant uneasiness of a peculiarly irritating and distressing kind; a sense of weight and pressure, as if the womb was continually descending; and she said she felt as if there was some pointed and hard foreign body in the vagina forcing its way backwards: intercourse so aggravated her annoyance that it could not be tolerated.

On making a vaginal examination I found the uterus lying very low, with its anterior lip projecting at least three-fourths of an inch beyond the posterior lip, which was quite concealed behind it; the under and posterior surface of the enlarged lip was ulcerated, and its texture a little hardened, but not more than is usual in cases of long-standing ulceration and inflammation of this part; otherwise, the hypertrophied lip appeared quite free from any malignant affection, and to consist merely of the common uterine tissue unnaturally developed. But I gave Dr. Creighton my opinion, that excision must be resorted to before a cure could be effected, as I thought it altogether improbable that local applications of caustics or discutients would be adequate to the removal of such an amount of altered

structure. He agreed with me; but as the patient was greatly alarmed at the idea of any cutting operation, and begged a further trial of other remedies, it was decided to wait, and try what might be accomplished by such means; and she was put on a course of hydriodate of potash, with Brandish's alkaline solution, and the enlarged part was touched with strong tincture of iodine, and several other applications of a similar character; but these measures did no good, and the patient was at length so annoyed with the incessant irritation, and so interrupted and prevented in following her necessary occupations, that, after three months, I was requested to see her again.

The ulceration was now very nearly healed, still the hypertrophied lip was no better, but rather worse; and on explaining to her the necessity for, and the painless nature of the operation, she readily agreed to its being performed.

Accordingly, on the 7th of March, 1849, I undertook it, assisted by Dr. Creighton and Dr. Hardy.

The patient was placed on her back, near the edge of the bed, with the limbs drawn up, and two broad curved spatulæ being introduced by these gentlemen into the vagina, its parietes were held asunder, and the diseased part easily brought fully into view, when I caught it with a small pair of hooked forceps, drew it down, and with two strokes of a curved scissors it was removed.

She felt no pain during the operation; an artery seemed disposed to bleed very freely, but I applied to it a small roll of lint soaked with the *liqueur hæmostatique*, and filled the vagina well with dry lint. There was no further appearance of hemorrhage, nor any unpleasant or unfavourable symptom of any kind: indeed nothing could be more satisfactory than her convalescence; and after a very short time she had completely lost every feeling of uneasiness, and the uterus had re-ascended to its proper place.

The amputated lip presented no morbid character, but simply the structure of ordinary uterine tissue somewhat hardened:



but I should observe that its size and condition, as seen now preserved in spirit, are very different from what they were when it was attached to, and forming a part of the living organ, in which state it was much larger, with its vessels gorged with blood, and its structure partaking of the erectile character naturally belonging to the lower part of the cervix uteri.

On the 3rd of April, that is, four weeks after the operation, I examined her, and, by the touch, could discover no difference between the anterior and posterior lip; on applying the speculum I was very much surprised to find that the extremity of the anterior lip presented no appearance whatever of having been cut; but the cut surface was quite distinctly visible about a quarter of an inch higher up on the anterior aspect of the cervix.

This, however, I can easily explain, although I confess I did not at the moment expect to find it so.

While the process of hypertrophy was going on in the anterior lip, accompanied as it was by much increased action and irritation, the whole lower end of the cervix, including, of course, the posterior lip, had lengthened out, and the two lips of the os had at the same time closed in upon each other, the anterior, however, most so, and partially overlapping the other. When the latter was removed, and the unhealthy action put an end to, the whole tissue became diminished in volume, and the natural mucous surface of the anterior lip was by degrees drawn out and everted. Of course the cut surface receded and ascended in a like degree.

Any one who has been much engaged in treating ulceration of the lips of the os uteri, cannot have failed frequently to notice this process taking place from week to week as the ulceration heals, and the enlarged and indurated uterine tissue gradually assumes its natural condition.

I have only to add, that the posterior lip, which at the time of the operation, was somewhat enlarged and elongated, was found to have also resumed its natural size and form; and

many months afterwards, I was informed by the patient, that she was quite free from every trace of her former annoyances, and felt perfectly well.

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ART. VI.—*Remarks on the Treatment of Acute Hydrocephalus.*

By HENRY KENNEDY, A. B., M. B., M. R. I. A., Fellow and Censor of the College of Physicians in Ireland.

MUCH as has been written on hydrocephalus, much still remains to be cleared up on the subject. With what a number of difficulties is it not yet surrounded? Who has not seen instances where the difficulty of arriving at a correct diagnosis has been great, or not heard of other cases where the medical attendant has been surprised by the sudden invasion of acute head symptoms, over which his art had little or no control? Or, again, who knows not how frequently other, and apparently very dissimilar, and it may be trivial affections, terminate in this intractable and most fatal one? Some such thoughts as these have induced me to bring under notice this subject once again. It should be premised, however, that I am not now about to enter into the subject at large, but merely, after detailing a few cases, to make some remarks, which the cases themselves, as well as the additional experience of the last six years, have forced on my attention. For the cases themselves I am chiefly indebted to my attendance at the Cork-street Hospital, and to the kindness of my friend, Dr. George Kennedy. The number of cases of the disease that are to be seen there, one year with another, has often surprised me; and there, as elsewhere, it occurs, that when one case is admitted, others are sure to follow. With these few remarks, then, I shall at once proceed to narrate the cases alluded to.

CASE I.—In May, 1845, I assisted my friend, Dr. Fawcett, of Clontarf, to make a post mortem examination of a boy aged four years. He was a perfect model in shape, and seemed to have been in very good condition. Though I am unable to



state the exact time, it appeared that, some few days previously to his last and fatal illness, he had a severe fall on his way home from school. This was followed by a state of dulness and listlessness, which lasted for two or three days, when he began to complain of his head; this was shortly followed by vomiting of an unusually severe character, attended with symptoms of very high inflammatory fever. He was then seized with convulsions affecting one side more than the other. The treatment was most prompt and decided, consisting of general and local bleeding, with calomel and blisters, and for a time with apparent amendment; but the violent symptoms recurred, and the boy sank on the fourth day of the acute attack. The head only was examined, and there we found, particularly on the anterior lobes, a considerable quantity of healthy pus effused, smeared, as it were, over the brain's surface, but still on the arachnoid. On making a section of the organ a large number of bloody dots appeared. There was some effusion into the lateral ventricles. The base of the brain was healthy.

CASE II.—A girl, aged six years, was admitted into Cork-street Hospital in October, 1849; she was a thin, delicate-looking girl, and one of three other cases admitted about the same time, all labouring under hydrocephalus. It is unnecessary to enter into any details, further than to say that, in the progress of her illness, she presented the following symptoms:—slight, but well-marked signs of fever; great and constant complaint of her head,—the cry so peculiar to the disease going on night and day for many days, and disturbing the patients in the ward; and then, as the disease advanced, convulsions of one side of the body, while the opposite side was rigid; dilatation of the pupils, one more than the other, with injection of one of the eyes; loss of flesh, and tendency to bed-sores. After these symptoms were present, more or less, for twelve days, the girl began to show signs of amendment. The eyes gradually got more appearance of life about them; the tongue would occasionally be put out; the fits of screaming ceased, at first in the day

time, and finally at night; and the rigidity of the body, together with the drawing back of the head,—which, I should have stated before, existed all through in a very marked degree,—finally disappeared; and the little patient, given up as lost some days before, made a good though a slow recovery.

CASE III.—In the month of October, 1850, Wynne, a very delicate boy, sixteen years of age, was admitted into Cork-street Hospital, labouring under fever. He was reported to be a fortnight ill. He had a hot skin and heavy eyes, with a contracted state of the brows; his tongue was furred, with a brown stripe down the centre, while his pulse beat but 60 in the minute, and was equal. He had some tendency to bowel complaint, and the nurse stated that he had vomited several times since his admission. On questioning him his only complaint was of his head, and he referred the pain to his forehead, just over the eyes. He remained very much as described for many days, during which all his complaint was of his head, while his pulse never exceeded 60, and on two occasions was as low as 54. During this period too he vomited several times, and frequently without any assignable cause. Finally the pulse rose to about 70, and with this change the other symptoms subsided, but so slowly that a month elapsed before the boy left his bed, and when up his appearance was far from that of health; nor could he be said to have fully recovered even on leaving the hospital some time later.

CASE IV.—At the very time that Wynne was in hospital, another boy, aged 16, was admitted, labouring under symptoms precisely similar. He was of small stature, but his head was large. When four years old he had awakened out of sleep affected with paralysis of the left leg and arm; and from that to the period of his admission into hospital he had never recovered the use of either. They were now both atrophied and contracted. On his admission his countenance was heavy, and expressive of suffering; he had fever, but not to any extensive degree; a very furred tongue being the most striking



feature of it. He had repeated vomiting both before and after his admission; the pulse at this time being, as in the last case, only 66, at which it remained for five days, and then rose. This boy's only complaint was of his head, and for some days the pain was of a very intense kind. By treatment, of which more will be said again, the symptoms gradually, though very slowly, subsided, and he was finally dismissed well.

In addition to those given, I have seen one other case, occurring in a girl of 17, where symptoms of fever ushered in head symptoms of a very marked character, and in which all the usual signs of hydrocephalus, including vomiting, dilated pupils, strabismus, slow pulse, and fever, were present. I have no particular notes of the case, but the patient recovered, though her recovery was unusually protracted.

The foregoing cases have been given with a particular object in view. The last four include all those of recovery which I have seen, in a period now of several years; and truly, on looking back, the remembrance is anything but pleasing; for there is exhibited a rate of mortality which, amongst what are called acute diseases, is only surpassed by hydrophobia itself. With such a fact in view, it is not, surely, too soon for us to call in question, or at least reconsider a disease and its treatment, where the mortality stands so excessively high. It is with this intention that these remarks are now put forward, and here, as in every other instance, I would wish them to be considered as suggestions merely.

I would begin this part of the subject by observing that the words "acute hydrocephalus" appear to me to have been unhappily chosen; for they at once convey the idea, as regards treatment, of bleedings, whether general or local, together with other parts of the antiphlogistic plan; and that they lead to this line of treatment, there can be no doubt of. All the standard works on the subject bear me out in this statement. Now is the form of hydrocephalus which we most commonly meet, an acute disease? I must reply to this question in the

negative. It is quite true that we shall meet the disease presenting very acute symptoms, and running a very rapid course. But I must assert that such are the exceptions to the general rule; and that in by far the majority of instances the disease is more of a subacute than of an acute character. The child's health is observed to be failing before the attack; he looks ill, and has possibly been losing flesh; and when the head symptoms do show themselves, though there commonly is considerable reaction, still, all who have observed the disease must recollect that this will have, in great part, subsided, for days before the fatal termination; nor indeed is it at all uncommon to see patients die with cold and livid extremities, failing pulse, &c. But again, does this form of the disease—which, it must be repeated, is the most common form,—terminate in the same time as an attack of acute disease, such as pneumonia? Every one must answer in the negative. In my own experience the average duration of the disease has been three weeks; sometimes a day or two under this, but as frequently a day or two over. There still remains one other reason, and to my mind it appears a very strong one, why we ought not to consider the more common form of hydrocephalus an acute disease. It has happened to me on several occasions to meet, amongst the poor, cases in which literally nothing had been done for days after the commencement of the complaint. Under such circumstances it might be expected that the disease would have run a more rapid course, but such was not the result; for though the children did ultimately die, they certainly held out as long as cases in which treatment had been enforced from the commencement of the attack.

But further. If we come to the nature of this intractable disease, the views put forward are still more fully borne out. For what is its essence; why is it that it should not yield, like other acute diseases, if it be of the same nature? Simply because it is not an acute disease, as the terms are usually understood. It is not like pneumonia or peritonitis; on the con-



trary, I agree with those who look upon it as a constitutional affection, and allied, in the great majority of instances, to the strumous diathesis. It has been my lot to have examined after death a very considerable number of cases of hydrocephalus, and in every instance where the examination extended to all the cavities I have invariably found tubercles in one or other organ of the body, sometimes in several organs at the same time. The liver, spleen, kidneys, mesenteric glands, lungs, and even the heart itself have been so contaminated; and in some instances I have found tubercles in the substance of the brain. Nor are these facts at all novel. Some forty years ago, Cheyne stated that it was common to find tubercles in the liver in these cases, and the fact has been confirmed by many other observers since. But I think it may be questioned whether the deductions which fairly arise from them are kept as prominently in view as they deserve.

If the foregoing remarks, then, be correct, it will be now understood why I am inclined to suggest that the term "acute hydrocephalus" should be changed; or at least, if retained, that it should be understood as not indicating acute disease, as it is commonly spoken of, but rather a subacute affection. Probably some may think that the mere change of terms would be a matter of little moment; I confess, however, I do not think so, but that it would be of importance if some term were used which would indicate that we have not acute disease to deal with. Passing by, however, the mere change of name, other and more serious questions follow from the views which have been advanced; I mean as to treatment, and this is really the important part of the subject; and as regards it, I venture to propose the following question: Is the treatment of the more ordinary form of hydrocephalus too heroic? I believe it to be so, and that a better prospect of cure will be held out by a treatment a good deal modified from that in common use. The limits, however, of this paper prevent me from entering into the subject at any length, and I shall, therefore, confine

myself to a few remarks on two of the remedies in most general use, I mean bleeding and mercury. Of the former,—and I am now only speaking of local bleeding,—I have fully satisfied myself that, speaking, of course, of the great majority of instances, very little of it will answer every purpose. This point I have been confirmed in by what has been already stated, viz., that cases left to themselves for days did not appear to run a shorter course than those where treatment had been adopted from the outset. What I would suggest, then, would be the use of as much local bleeding, and no more, as would suffice to relieve pain; for as to cutting short the progress of the disease, I look upon it as vain. Let me not be misunderstood, however. There are cases of the disease of a really acute kind, and these must be met, not only by free local, but even by general bleeding. It was to illustrate this that the first case I have detailed was given; and this too is an additional reason for drawing a distinction between what is *really* acute, and what has hitherto *been called* acute disease. But then it must be borne in mind that the former is the exception to the general rule, and that for one such, there are at least ten of the latter, possibly more. Of the acute form of the disease I have seen different instances where the result was favourable; one, some short time back, I saw casually with my friends, Drs. Irvine and Denham.

To mercury similar remarks, I think, apply. It would seem, as far as I have seen, to be used as a *sine qua non*; and yet the results do not appear to justify such a faith in it. If the attack be of the really acute disease already spoken of, probably no better medicine than calomel can be employed. But in the more frequent form of the affection I have had the conclusion forced on my mind that other means held out a better prospect of success; and the same conclusion had been arrived at before myself, by the physician to whom I have alluded in an earlier part of these remarks, Dr. George Kennedy.

I may mention, as bearing out these views, that I have notes



of more than twenty cases of hydrocephalus, in which the specific effects of mercury were produced, and yet in not one of these cases was the result favourable, to say nothing of others where salivation could not be induced. And indeed if we consider for a moment the specific nature of the disease, it will not appear strange that such an amount of fatality should attend it. It is, I believe, an established rule that mercury does not act favourably in strumous constitutions. Hence we can offer some explanation, at least, why such unfavourable results should occur in the cases alluded to. Is it, I would ask, in weak, strumous children, with a strong predisposition to form tubercles, is it right to give mercury, and do our utmost to induce its specific effects? The answer to this must be in the negative. But then it will be asked, what other resource is there—what means would you use? And this leads me, in conclusion, to make a few remarks on the treatment which I believe holds out the best prospect of success.

At the commencement of this paper four cases were given, in which recovery took place after the disease had passed into the second stage, that is, when the pulse had fallen. Now it is specially worthy of notice that three out of the four were not salivated; and in the fourth salivation was produced more by accident than design; in fact he had got a small quantity of hydrargyrum cum cretâ, when his mouth became suddenly and severely sore. They were all leeches, and the grey powder, in very minute doses, as an alterative, was administered with antimonial powder. Blistering was very freely used, at first in the ordinary mode, and subsequently, in two of the cases, under the form of the tartar emetic plaster applied to the head; and in this way a constant discharge was kept up. But, in addition to these measures, particular attention was paid to keep up the strength: some got beef tea and others wine, and this while the disease was still present. The child of six years old got two ounces of wine, which was increased to three in the day; and this was given while the pupils were still dilated, while the

screaming was constant and the convulsions existed; and it was apparently under its use that this child rallied. Other measures, which are, however, in every-day use, were also enforced, but need not be spoken of here. The recovery of all was unusually protracted and slow, as indeed we might expect in such cases.

From this brief sketch it will readily be inferred what the line of treatment is which I would venture to suggest in this intractable disease, and I can only venture to suggest it, inasmuch as the experience I have had has been too limited to enable me to speak with confidence of it. But what then? Is it not better to act on a hint of this sort, few though the recoveries have been, than continue in the beaten path, which we know, as a matter of fact, leads to such a fearful mortality. I cannot think there is anything irrational in the general views of the disease which have been now stated, while the mortality alluded to will justify any modification of treatment which will hold out a reasonable prospect of success. To sum up, then, I would say that the ordinary form of hydrocephalus is a sub-acute disease, that bleeding and mercury ought to be very moderately used in this form of it, while wine or other stimulants ought to be given as early as prudence would justify<sup>a</sup>.

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ART. VII.—*Observations on Arsenical Poisoning.* By T. G. GEOGHEGAN, M. D., Fellow and Professor of Forensic Medicine, Royal College of Surgeons, Ireland; Surgeon to the City of Dublin Hospital; Hon. Member of the Natural History Society, Montreal, &c.

THE increasing interest which attaches to the practical study of legal medicine, and the responsibility which, in charges of poisoning, devolves upon the medical witness, induce me to lay

<sup>a</sup> It was my intention to have made some remarks on the treatment of other affections which occur in the strumous constitution, and as bearing out the views advanced; but my limits prevent this at present.



before the profession a portion of the results of my inquiries and experience in reference to arsenic, a substance confessedly the most usually resorted to for criminal purposes in the British Islands. The position of the medical witness in charges of poisoning is somewhat peculiar, as upon him exclusively devolves the burden of the proof as to the mode of death; although, unfortunately, in many cases the information which he is enabled to communicate is nullified (as far as concerns the conviction of the guilty), by the difficulties which surround the proof of administration.

Although criminal poisoning is essentially a secret crime, some of the following cases will, I trust, serve to show, that even the proof of administration with intent, is sometimes within the power, and undoubtedly within the province of the medical witness.

The general observations which I shall have occasion to make, and which refer to the vital manifestations, morbid changes, physiological distribution, antiseptic powers, and detection of the poison, I shall reserve till the cases on which they are based shall have been stated. The latter I shall give in detail; for although in so doing I may incur the risk of being tedious to the general reader, I shall be thereby enabled to afford the medical witness the opportunity of comparing individual conditions with those which he may have himself encountered in any case under his investigation, and also to furnish (as far as may be) to the toxicologist in search of generalizations, an increased basis for the construction of the latter.

I trust, therefore, to receive the indulgence of the medical and medico-legal reader, and I have only to regret that, from the influence of circumstances for the most part beyond my own control, the series of conditions described in the following histories are not uniform throughout.

CASE I.—P. Bannon, a farmer, and Jane Shalvey, were indicted at the Commission Court, Dublin, in April, 1845, for the murder of the husband of the latter. It appeared that the pri-

soners had maintained for some time an adulterous intercourse, in consequence of which the deceased and his wife lived upon bad terms. The male prisoner was proved to have purchased arsenic at Drogheda, for the alleged purpose of destroying rats on his brother's premises; but he had not been authorized by him to do so, nor had his brother been informed of his intention. The female accused was most inattentive and unfeeling to her husband during his illness, and married Bannon in three weeks after his death.

It appeared that the deceased, who was from twenty-five to thirty years of age, and previously healthy, was seized with illness on the morning of the 17th May, 1844, in about an hour after having breakfasted on oatmeal porridge made for him by his wife. He did not experience anything peculiar in the taste of the food. His symptoms were nausea, feeling of distention of the stomach, accompanied by great pain, "as if there were a *fire* within him," burning in the mouth, and, subsequently, vomiting of a greenish fluid; to these were speedily added burning in the throat and along the œsophagus, urgent tenesmus, with slight discharge of mucus, and excoriation of the anus, frequent micturition, and pain in the bladder. On the fifth day he was hoarse, and exhibited pimples or vesicles around the mouth; and during the latter part of his illness (which became gradually more aggravated) there were coldness of the surface, sordes on the teeth, a livid circle around the eyes, failure of vision, and discharges of a bloody matter from the stomach. He laboured throughout under constant and excessive thirst, great restlessness, bloodshot conjunctivæ, and an anxious countenance. He also exhibited frequent *priapism*. The duration of the illness was eleven days and a-half. No medical assistance was obtained for him, but he was assiduously attended by his brother, who, although appearing not to have appreciated the nature of the attack under which he laboured, described his symptoms with much intelligence.

It is worthy of remark, that at an advanced period of his



illness he retained sufficient strength to leave his bed and enter a neighbouring cottage. He was buried on the third day after death. Suspicion having subsequently fallen on the accused parties, an exhumation was ordered, and performed forty-six days after death, by Dr. M'Evoy, of Balbriggan. The soil of the churchyard was described as calcareous, and consisting in part of loose shingle. The coffin was found split, and had been placed but from one to one and a-half feet beneath the surface<sup>a</sup>. The body was entire, of a greenish black colour, the cuticle peeling off, the surface moist, and the face worm-eaten. The abdomen was moderately distended with gas, and its interior manifested considerable *elevation of temperature*; the abdominal viscera were in a good state of preservation, having maintained their lustre and firmness unaltered, although discoloured, and exhaling a moderately fetid odour. The mucous membrane of the *stomach* was of a uniform light reddish brown colour, firm, and yielding on traction a flap of half an inch in length. There was no trace of erosion, ulceration, or bloody extravasation upon it, or in any other part of the alimentary canal. The submucous tissue was natural, both in colour and consistence; the inner surface of the stomach was rough and granular to the finger, owing to the presence of yellowish white crystals, partially imbedded in the lining membrane. These were found to consist of *ammonio-phosphate of magnesia*. At the second exhumation (see below) similar crystals were observed on the inner surface of the jejunum and ileum, on the endocardium, and in great abundance on the bronchial mucous membrane. The stomachic contents, or rather the *washings* of the organ, were of a dark reddish grey colour, turbid, and containing in suspension a quantity of silvery-looking and apparently fatty particles. The inner surface of the duodenum, which was dark brown, was smeared with a thick substance, of

<sup>a</sup> The mean diurnal temperature of the atmosphere, during the period of the first inhumation (forty-six days), was 58° F.; and during the interval between the first and the second inhumation was 60° F.

unctuous consistence, of a dark purple colour, and evidently containing much hematosine. The peritoneal coat of the concave surface of the liver presented streaks of an adherent white granular matter, which was found to be *sulphate of lime*.

On a second exhumation, which took place ten and a-half weeks (seventy-four days) after death (and was rendered necessary by the non-detection of poison in the stomach, which was the organ first submitted to me), the remainder of the abdominal and the thoracic viscera were found in good preservation, and the alimentary tract not materially altered, as compared with the portion examined on the first occasion. The mucous coat of the jejunum and of the ileum presented patches of pseudo-morbid staining, of various shades of brown and black. There were also several patches of vivid brownish redness, apparently inflammatory. The mucous glands in the lower part of the ileum appeared as slightly raised brown dots, beset with crystals of triple phosphate. The mucous coat was softened, the submucous natural, and the former copiously smeared with a viscid, greasy-looking reddish-black material, containing blood. In the great intestine the mucous membrane was of a reddish-brown colour; in the descending portion of the colon, lighter; in the rectum, reddish-grey, and presenting generally numerous small circular abrasions, with coloured borders formed by the softening and removal of the mucous glands. The contents were similar to those of the small intestine, and included thirty-four grains of *shot*, apparently uncorroded<sup>a</sup>. Traces of dissolved *lead* were, however, distinctly dis-

<sup>a</sup> The importance of a minute inspection of the intestinal contents is well illustrated by the present case. In consequence of the absence of a label on the coffin, and the altered state of the countenance, a difficulty arose at the trial as to the legal identification of the body; this was set at rest by the discovery of the *shot* in the intestine, as it was proved that a dose of the latter had been administered during his illness, by a well-meaning neighbour, as a means of alleviating pain; and inquiries having been instituted at my suggestion, the remainder of the shot was discovered in the house of the deceased.



coverable. The liver was very soft, fetid, and internally of an uniform rich olive colour ; kidneys and spleen also softened ; lungs scarcely so, but shrunken, lobuli distinct, parenchyma rather dry, and of a dark purple-red ; the heart, flaccid, and destitute of blood.

*Chemical Examination.*—The contents of the stomach and of the small intestine yielded no evidence of the presence of arsenious acid. About one-twentieth of a grain was discovered in those of the colon. The *tissues of the stomach, small and great intestines*, and those of the *lung* (severally examined), afforded, by the process of Reinsch (preceded by carbonization with sulphuric acid), no traces of arsenic. The poison was discovered in full quantity in the *liver*.

No doubt could, of course, exist in the foregoing case, that death had resulted from the administration of arsenious acid. The usual objections were preferred against the individual items of medical proof ; an attempt was also made by counsel to show that the poison discovered might have been derived from the shot administered as a medicine ; arsenic, as is well known, being employed in the fabrication of that article. I had, however, found, first, that the shot evinced no evidence of its presence ; secondly, that the latter was not disintegrated ; and, lastly, having been administered on the eighth day of deceased's illness, could not have been the cause of the latter. The unfortunate error of Orfila, relative to the existence of so-called *normal* arsenic in the bones, and his subsequent partial recantation, which were elicited on cross-examination by prisoner's counsel, appeared also to have been not without their effect on the jury, as weakening the value of chemical evidence in general. The prisoners escaped conviction apparently on the ground that the arsenic proved to have been purchased by one of them, had been procured the day *after* the commencement of the husband's illness. There had, doubtless, been a previous purchase or possession of the poison. It is worthy of remark that the intestinal coats (although in a better state of

preservation than the liver) yielded no traces of arsenic, thus tending to support the view, which I have already advocated, of the *catalytic* action of arsenious acid as a preservative agent<sup>a</sup>.

In the present instance of eleven and a half days' illness arsenic existed apparently in as great quantity in the liver, as I have found it in other cases, which had proved fatal in from seven to thirty-six hours.

I am indebted for the history of the following case, and for an opportunity of witnessing the inspection, to Dr. Wm. Geoghegan, Surgeon to the Kildare Infirmary.

CASE II.—Six persons (five males and one female) partook of a cake, into which a tea-spoonful of white arsenic had been introduced in mistake for soda. The cake was served out for breakfast by the woman who had made it, although she had eaten a small portion of it herself on the preceding evening, and been seized with vomiting, which persisted during the greater part of the night. The males were of the respective ages of 47, 45, 22, and 21; the female aged twelve years. The individual (aged 47) who partook of the largest quantity (about one-quarter of the cake) sank under the effects of the poison, after an illness of thirty-six hours. The rest recovered. The latter had each partaken but of a small portion, but were, notwithstanding, seized almost immediately with severe vomiting. Nothing peculiar in the taste of the food was experienced by *any* of the parties (most of these persons had partaken of whiskey previously to their food). When seen, ten hours afterwards, three of the five who recovered (one of whom had previously taken an emetic) were free from pain, but laboured under heat and dryness of the skin, constriction of the throat and œsophagus, tightness and dryness of the chest, thirst, and a quick, wiry pulse. On the next day, although most of these symptoms persisted, with the addition of whiteness of the tongue, the sufferers left the hospital. On the third day they

<sup>a</sup> See a paper by the author, on the morbid appearances in arsenical poisoning, Medical Gazette, August 2, 1850.



were attacked with a miliary eruption, confined to the forehead, wrists, and feet.

In the fatal case vomiting supervened within five minutes after the cake had been eaten, and was frequently repeated. About an hour and a half afterwards, an emetic was administered. The patient was brought to the infirmary about twenty-five hours after having partaken of the poison, in a state of hopeless collapse; the countenance not much sunken, surface cold, pulse scarcely perceptible. The vomiting had ceased, but there were frequent calls to stool, with the discharge of small quantities of a brick-red fluid; there was little thirst, no complaint of pain, and no cerebral disturbance. He died in eleven hours after admission.

*Inspection.*—The body was examined eighteen hours after death, the weather at the time being quite cool, and the mean temperature 55° F. The neck and scrotum were very emphysematous; and twenty-two hours after death the subcutaneous areolar membrane generally was in the same condition. In thirty hours (the body having been removed) the intestines were dark green, highly fetid; and as they lay in a vessel evolved gas rapidly, with an audible bubbling.

*Alimentary Canal.*—The œsophagus presented some patches of vascularity, and its epithelium, which was emphysematous, was smeared with a little bloody mucus. Stomach: the lining membrane was coated slightly with a bloody fluid, and was of a rather uniform dark-red colour, with scattered blotches of black extravasation. The mucous coat was not softened, except at the splenic end, and presented numerous erosions, some of a rounded form, but the majority forming long, narrow, sinuous, and intersecting furrows, having a defined edge, destitute of hardness or special coloration, and exposing the submucous coat. They conveyed to the eye the impression that a narrow stream of some corrosive fluid had flowed in various directions along the inner surface of the stomach. The submucous coat was rather injected. The mu-

cous membrane of the rest of the digestive canal was of an uniform chocolate brown colour (apparently from imbibition of the contents). There was a good deal of submucous injection of the colon, the transverse and descending portions of which showed a few small blotches of ecchymosis beneath the mucous surface. No trace of ulceration was discoverable. The liver was soft and emphysematous from putrefaction.

*Chest.*—Anterior surface and margin of the right ventricle of the heart presented blotches of ecchymosis beneath the serous membrane; none on the endocardium or valves; muscular tissue of the organ soft. Lungs: posterior part of both much engorged with blackish, semi-coagulated blood, giving to the part the appearance of pulmonary apoplexy; the tissue broke down readily under the finger. No fluid in bronchial tubes, whose mucous surface was green. The blood in the great systemic and hepatic veins was fluid; that in the cavities of the heart and great thoracic vessels dark-coloured and coagulated, with the exception of that of the right ventricle and ascending aorta, where it was semi-fluid. Numerous globules of oil and air, were seen floating in the blood of the aorta, pulmonary vessels, and *venæ cavæ hepaticæ*.

*Chemical Examination.*—No traces of arsenic were discoverable, either in the stomachic contents (small in quantity and chiefly a bloody mucus) nor in those of the rectum. There were dubious indications in those of the jejunum, and distinct traces in those of the colon. The poison existed in full quantity in the tissue of the *liver*. None could be found in the *heart or lungs*, nor in *the blood*.

The rapid progress of putrefaction of the entire body in the present case is remarkable, both as occurring in a form of death where its preservation, in whole or in part, has been so often observed, and as taking place under the adverse condition of cool weather. It is to be particularly noticed that the liver, in which absorbed arsenic was detected in fully the usual quantity, participated in the decomposition as fully (due



allowance being made for difference of tissue) as the heart, lungs, and blood, in which none could be discovered. The chemical facts, also, in conjunction with those in Shalvey's case, No. I., tend both to fortify the catalytic theory of the action of arsenic as an antiseptic, and to show that intrinsic conditions (perhaps of the blood) are sometimes adequate to nullify that action completely.

CASE III.—L. L., aged 43, a married woman of intemperate habits, left her home early on the morning of the 9th of March, 1844, and called on a friend to borrow some pence, which she stated she required for “a very particular purpose.” She returned home at midnight, drunk, and was attacked with vomiting, which continued during the night, accompanied by bilious purging and violent thirst. During the next day the vomiting and purging were less violent. She was free throughout from restlessness or pain, and shortly before death expressed a wish to sleep. The surface of the body and the extremities were warm until a short time previously to the fatal event, which took place seventeen hours after her return.

*Inspection, twenty-two Hours after Death.*—Mean temperature 46° F. Some livor of the posterior surface of the body; rigor mortis well marked, and continued so for forty-one hours after death, at which period the abdomen had become greenish from incipient putrefaction, the rest of the body being quite fresh.

*Alimentary Canal.*—Epithelium of mouth remarkably white and opaque; velum palati pale, and having a macerated and wrinkled appearance; on opening the abdomen a most oppressive, sickly, and rather feculent odour was exhaled, which proved to be due to the stomachic contents, consisting of a quart of turbid, orange-coloured, and rather viscid fluid. Stomach: the mucous membrane of the body and splenic end had acquired a tolerably uniform orange colour by imbibition of the contents, accompanied in part by a tinge of redness, but without vascular injection. In the former part there were a couple of small pe-

teelial ecchymoses. The pyloric third presented three distinct blackish-red ridges, projecting at least a quarter of an inch above the adjacent surface, and crested with a white, curdy-looking matter, which adhered with considerable firmness, and proved to be arsenious acid incorporated with mucus. These ridges were firm, and, when the coating was removed, rough to the feel; a section having been made, they were found to be formed exclusively of the mucous membrane, having blood incorporated with a part of its tissue. In the vicinity of the ridges the latter was thickened and indurated, yet but little altered in colour; there was also a circular blotch of adherent arsenic, and beneath it a rough, fungous, and highly thickened mucous surface, but no appearance of black extravasation, ulceration, or slough; at the splenic end arsenic was scattered over the surface, as a gritty and glittering powder; the membrane of this part was not thickened, and gave a flake of one-third of an inch on traction; the pyloric end yielded one, of an inch and a half. The mucous coat was injected at the pyloric end, elsewhere natural. Duodenum lining membrane dark-red, arsenic scattered over its surface; mucous membrane of jejunum and ileum not thickened; contents, a considerable quantity of thick material slightly coloured with blood, and mixed with white flakes. Great intestine: mucous membrane natural in colour and consistence throughout: contents, a thick uniform matter of grey colour, small in quantity. Ramiform submucous injection of both small and great intestines.

*Thorax*.—Heart: right auricle loaded with black, firmly coagulated blood; a little in the left auricle and right ventricle; a couple of non-elevated blotches of ecchymosis, about the size of a pea, beneath the endocardium of the latter.

Lungs: posterior part gorged with dark, semi-fluid blood, apparently extravasated in the tissue<sup>a</sup>.

Blood: dark-coloured, and quite fluid in the abdominal

<sup>a</sup> Maceration restored the natural texture.



cava: in heart and lungs, as above<sup>a</sup>. The uterus was lined with decidua; and a large corpus luteum was apparent in the left ovary; no ovum could be discovered. The deceased had menstruated about six weeks before death, and the breasts exhibited a tolerably well-marked areola.

The intestinal canal (removed from the body) showed signs of putrefaction twenty-four hours after death, and the great intestine was quite putrid in forty-eight. The stomach and uterus were quite fresh on the third, and the muscular tissue on the fifth day. (Mean temperature of interval of five days,  $42\frac{1}{2}^{\circ}$  F.)

*Chemical Examination*.—Arsenious acid was readily found in the stomachic contents, and coating the ridges described; a trivial quantity in the contents of the small intestine; very dubious traces in those of the colon; none in those of the rectum. The poison was discovered very distinctly in the tissue of the liver, freed from blood by division into small fragments, and repeated maceration in distilled water. The quantity was eight-tenths of a grain for the entire organ; and traces were also found in the tissue of the *uterus* and lung, and also in the texture of the muscles, in the proportion of one-thirteenth of a grain to the pound. No trace of arsenic could be found in the venous blood (owing to an accident, a small quantity only was examined), in the blood extracted by maceration from the liver, nor in the *bile*. The urine was not examined, there being very little in the bladder.

CASE IV.—Mr. Tagert, Surgeon to Mercer's Hospital, as kindly permitted me to publish the following case:

C. Sheridan, aged 25, committed suicide by swallowing

<sup>a</sup> I have noticed in many inspections the erroneous nature of the view so generally entertained, that, in a given form of death, the blood is to be found throughout the body in the same condition. The observations of Bernt (Beiträge zur gerichtl. Arzneikunde ii. 231), on this subject, are worthy of attention.

arsenic mixed with water ; the quantity could not be ascertained<sup>a</sup>. A quarter of an hour afterwards there were stinging sensations in the mouth and pharynx, with giddiness; in forty minutes, nausea, and a flow of viscid saliva from the mouth, with heat of fauces, stupor, small and frequent pulse. After the employment of the stomach pump (when the organ was well washed out), she experienced relief, and then complained but of slight headach. Vomiting soon after supervened, and continued incessantly till near death, which was preceded by much cramp of the legs. There was some purging. Death occurred in nine hours.

Inspection (at which I was present), *nine* hours after death.—Weather moderately warm (mean temperature  $59\frac{1}{2}^{\circ}$  F.); body quite fresh, and continued so for thirty-three hours after death.

*Alimentary Canal.*—Tongue: papillæ very prominent, uvula and fauces corrugated and white. Stomach: peritoneal coat vivid red, its vessels not much injected; mucous membrane thickly studded with small, vivid red blotches or stellæ, arranged in serpentine intersecting lines, the intervening spaces of which were still more closely beset with minute red dots; two or three small patches, apparently of extravasated blood, were evident in the body of stomach; membrane at the pyloric end of natural consistence and adhesion, but opaque; that of the great extremity softened and a little swollen, more easily detached than natural; no adherent arsenic. Contents, a quart of orange-coloured fluid, turbid and viscid, with a little bloody mucus. The mucous membrane of the duodenum reddish and swollen; mucous glands enlarged; ileum natural; contents of both, a yellow mucous fluid. Great intestine: some redness of the mucous coat of transverse portion; submucous ramiform injection of great and small intestine. Contents of colon, a yellowish white fluid of starchy consistence. Liver healthy; gall-bladder containing a little bile; spleen granular and soft;

<sup>a</sup> No inquiry was made as to the taste of the draught.



kidneys and urinary bladder natural; ovaries dark-coloured; lining membrane of uterus and Fallopian tubes vascular. Chest: some frothy fluid in the larynx and trachea; lining membrane between the rings red; posterior part of lungs engorged, giving out a frothy fluid on section, and a purulent-looking one from the bronchial tubes; membrane of the latter red. Heart: no trace of ecchymosis on lining membrane; right auricle full of *fluid* blood; right ventricle and left cavities empty. Brain and its membranes natural. *Blood*: generally dark-coloured; but *vivid red*, and in small quantity, in the *aorta*.

*Chemical Examination.*—Arsenic was detected in the stomachic contents, in the tissue of the organ, and (in small quantity) in the mucous fluid of the great intestine. It was also found in the liver by the method of Reinsch. For a considerable period, the dried fragments of the latter evolved a strong alliaceous odour, which was equally perceptible in the kidneys. A quantity of the dried liver corresponding to one pound of the recent organ (after the odour of garlic had been replaced by a totally different one) yielded 0·15 grains, which would give for the entire liver, half a grain (q.p.) No doubt, much of the poison had escaped as arseniuretted hydrogen. The blood, when dried by exposure to air, exhaled an alliaceous smell, and afforded (when examined some time afterwards) faint traces of arsenic. The muscular tissue gave no decisive evidence of the poison.

It was remarkable that the dried fragments of the organs, while exhaling the garlic odour (and not previously), were attacked by small, transparent mites (resembling an acarus under the microscope), which fed on them for a long period, despite of the atmosphere in which they were placed. I have observed the same occurrence in other cases.

CASE V.—Mary Cullen was indicted, at the Wexford summer assizes, 1846, for the murder of her brother. The evidence and the prisoner's confession proved that she had on two occasions purchased, and on a specified day deliberately

thrown, arsenic into water which was being boiled for the purpose of making porridge; of which food the deceased and his three brothers, and mother, partook, as also a poor woman who called at the house: the prisoner, too, afterwards ate some of the porridge<sup>a</sup>. Four of these parties died; three of them after an illness of from five and a-half to seven hours, and one in fifteen hours. A hen also that ate some of the food died in a few hours. The mother suffered but slightly, the prisoner more so, and one of the brothers recovered, but suffered from an illness of some duration, which, after the lapse of a month, still manifested its effects in partial paralysis of the lower extremities, and desquamation of the cuticle. The prisoner was acquitted, *on the plea of moral insanity, on the most frivolous evidence*. No indication of mental unsoundness was discoverable on careful examination, either by the physician of the gaol, Dr. Boxwell, or, subsequently to the trial by myself, nor (as I am informed by a late visitant of the lunatic asylum) has the prisoner since shown any signs of insanity. If not traceable to other influence, the crime may have been committed under that condition of moral perversity not uncommonly observed in the hysteric state. Whether such disturbance of the *affective faculties* only, should absolve from criminal responsibility, has been lately the subject of much and subtle discussion amongst psychologists, nor is the question as yet satisfactorily adjusted.

The illness of the suffering parties was characterized by nausea within fifteen minutes after the meal, vomiting (at first bilious, then bloody), burning pain in the stomach, *slight* tenderness of the epigastrium, and constant thirst. There were also flushed countenance, headach, and suffusion of the conjunctivæ,

<sup>a</sup> In the latter particular this case resembles that of Elizabeth Fenning, which created so much public interest in London several years ago. Although the intrinsic merits of the two, seem to have been pretty similar, the accused in the present case had a more fortunate fate. A report of the trial may be found in the Medical Gazette, vol. iii. p. 424, 1846.



faintings, quick, small pulse, and cold extremities. One of the sufferers complained, *during the meal*, of the “queer” taste of the food. The bodies were examined by Dr. Goodall, forty-eight hours after death, when putrefaction had made as much advance as might be expected from the date of the examination and the existing temperature. Externally there was nothing remarkable. The stomach and intestines were inflated with air; in three there were patches of very dark redness on the mucous membrane; in one, the lining coat presented an uniform sheet of the latter colour. The submucous coat was congested. The stomachic contents consisted of a small quantity of turbid brown fluid, in one, containing a good deal of altered blood. The brain (examined in one case) was congested on the surface, and the lateral ventricles distended with limpid serum. The blood, as far as examined, was fluid. The bodies were exhumed, at my request, a month after interment<sup>a</sup>, at which period the integuments and muscles were somewhat dried; and part of the intestinal canal of one, and the livers of all four, having been transmitted to me, I found them in good preservation, maintaining their colour, firmness, and lustre completely, and showing inflammatory patches in the great intestine of one, with a vivid freshness. The odour of the parts was offensive, *rancid, and diffusive, quite different from that of ordinary decomposition*; and the dried fragments of the liver (containing arsenic) still (January, 1851) maintain a distinct *acid* reaction. A portion of the stomachic walls of two (containing arsenic in the usual amount), which have been macerating for four years and a-half in the non-arsenical contents, are, like the latter, ammoniacal, while the contents of another case, which yielded arsenic freely, were acid, a month after death, but fetid. The peritoneal and submucous coats of the former retain their physical characters scarcely impaired; the muscular and mucous (particularly the latter) are soft and swollen.

<sup>a</sup> Mean temperature of interval, 65° F.

*Chemical Examination.*—The stomachic contents (two and a-half ounces) of one of the cases (which proved fatal in about seven hours) yielded 1·2 grains arsenious acid. None could be found in those of the others (which were respectively fatal in seven, seven, and fifteen hours). Absorbed arsenic was also distinctly indicated in the *tissues* of the stomach of two, and in the muscular structure. The liver of one (fatal in seven hours) yielded half a grain; of the one fatal in fifteen hours, 1·2 grains. The *skin*, *areolar membrane*, and *fat*, separately examined, did not afford a trace. The porridge contained about one grain to the fluid ounce. The exhumed viscera in the above cases afforded good specimens of what I have elsewhere<sup>a</sup> designated as *rancid putrefaction*.

CASE VI.—Jane Maher and Garret Lynam were indicted at the Kildare Spring Assizes, 1847, for the murder of Mr. R. Grattan, son of Dr. Grattan, Fellow of the Royal College of Physicians, and an esteemed magistrate of the county.

The transaction arose out of the prejudice entertained at the time to the use of Indian meal as food, and which the servants of Dr. Grattan had refused to eat. In about a quarter of an hour after having breakfasted on oatmeal flummery prepared by the female prisoner, the deceased and six other members of the family were seized with bilious vomiting and other symptoms of arsenical poisoning, from which they suffered for variable periods. The deceased died in about twenty hours, in a state of collapse. I am unable to furnish in detail the symptoms of the rest : in some of them pustules appeared on the forehead during the progress of their illness. Two of the party observed that the food produced in a very few minutes (five to seven) a burning in the throat, but did not experience any distinct flavour in the act of eating. Neither of the prisoners partook of the flummery. On the previous day the remainder of the *Indian meal* stirabout, on which the family had

<sup>a</sup> Medical Press, April 17, 1850.



breakfasted, had been given by the female prisoner to the calves (although she was not in the habit of feeding them). Three of the latter speedily died. The stomach of Mr. Grattan, when forwarded to me seven days after the occurrence, was so altered by maceration, that any morbid alterations which may have existed had disappeared. The contents (seven fluid ounces) were of a feculent colour, of a rancid, nauseous odour, and had a strong acid reaction.

*Chemical Examination.*—The contents yielded no evidence of arsenic, but one-tenth of a grain was discovered in the tissue of the organ (by carbonization with pure sulphuric acid and precipitation, by the method of Reinsch). In one of the calves the lining coat of the stomach was inflamed, and the contents yielded arsenic. The flummery was grey, heavy, and exhaled, when first exposed, a marked alliaceous odour, and contained, in less than a table-spoonful, about six grains of arsenious acid. The steeped seeds, from which the flummery had been prepared, gave no trace of poison, nor yet a specimen of the unboiled Indian meal. Hence the chemical inquiries alone indicated it as most improbable that the poisoning was accidental, and, conjointly with the general facts, rendered it impossible. Although the moral evidence was also strong, the jury, however, did not convict the prisoners.

It is worthy of remark, that at the end of eight months the membranes of the calf's stomach were quite firm, little altered in colour, and, like the contents, had a strong acid reaction, which they still (January, 1851) retain undiminished. The tissue is now softened and discoloured, and the odour is highly rancid.

CASE VII.—Mary J. Middleton and her mother, C. Rooney, were indicted at the Leitrim Spring Assizes, 1849, for the murder of the husband of the latter. The deceased, a farmer, previously quite healthy, had partaken of luncheon with his son-in-law and another person. The food, which was served by his daughter, consisted of griddle-bread and tea; the former having been divided (as is usual) into separate portions, pre-

viously to being baked. In about three-quarters of an hour afterwards deceased became ill, and died in *eight hours*. The other parties were quite unaffected. Rooney made no remark as to the taste of the food. His symptoms were, vomiting, purging, tenesmus, hoarseness, pain in the loins<sup>a</sup>, and coldness of the extremities. There was no thirst nor burning of the throat. On the next morning, a woman of the household made a flour cake, in the same bowl which had been used for preparing the bread above described, and a remnant of the dough of the latter still adhered to the bottom. The daughter of deceased and her husband partook of this second cake *without any injury*. The maker of it next proceeded to prepare a small one for herself, from the scrapings of the bowl. Although the food was eaten deliberately, no taste was experienced. About three-quarters of an hour after, she was seized with vomiting, giddiness, and thirst; a sensation of burning in the gums and tongue; and on the cessation of the vomiting, purging occurred. She was ill for four or five days. *Her infant*, whom she *suckled twice* after having partaken of the cake, was affected on the next day with *purging*.

Middleton and her sister professed illness, in consequence of having partaken of the bread at the same meal with the deceased; the symptoms assigned by both were, however, so trivial, and, in the case of the latter, were stated to have come on so many hours after eating, that little credit deserves to be given to their averment.

The body of deceased was examined three days after death, and was then (the weather being cool) in perfect preservation. The mucous membrane of the stomach and upper part of the small intestines, and a patch in the cæcum, were reported by Dr. Davis, of Manor-Hamilton, to have been highly inflamed, and the contents of the stomach to have been a thick red fluid.

<sup>a</sup> In the case of the Rev. T. Maguire, for whose murder parties were tried at the same assizes, violent pain in the loins was complained of, and I believe the kidneys were found congested.



When examined by me, thirteen days after death, the latter were of the colour of coffee-grounds, of a peculiar odour, and strongly acid, having quite the physical characters observed in poisoning by oxalic acid. I found a large tract of the mucous membrane of the splenic end and body of the stomach of the same colour as the contents; the coloration terminating quite abruptly some distance from the pylorus. The posterior wall of the splenic end was of a uniform red, with a couple of blotches of black extravasation, very readily removed by slight scraping, and leaving behind the appearance of erosion. Near the pylorus was a fine punctated vascularity. The mucous coat of the body and splenic end was much softened (from imbibition of the acid contents); that of the pylorus thickened, and yielding a flake of more than two inches. Submucous coat, with a trivial exception, natural. The lungs were congested. The liver, kidneys, and urinary bladder healthy. The blood in the vessels generally, and in the lungs, coagulated.

*Chemical Examination.*—The contents of the stomach indicated freely the presence of arsenious acid, and are now (December, 1850) as fresh as when first received. Arsenic was found in a portion of the cake eaten by deceased.

The accused parties were acquitted, apparently from defective proof of guilty administration. The transaction was believed to have been connected with pecuniary matters.

The foregoing history may serve to impress medical witnesses with the necessity of inquiring accurately into the general facts, and the preparation of the food, in cases of poisoning, and of making allowance in their inspection for pseudo-morbid changes.

CASE VIII.—Bridget M'Cullagh was indicted for the murder of Margaret Jackson, at the Commission Court, Dublin, in 1837.

The parties were servants, residing in a family at Clondalkin, and had been previously healthy. The deceased and the butler were seized with illness very shortly after having

partaken of tea made by the prisoner, who, although present, did not join in the meal. The subsequent expressions of the latter rendered it probable that the poison had been dissolved in the boiling water, previously to the infusion of the tea.

The motive which led to the occurrence was vexation on the part of the prisoner at the discovery of her illicit amours, which had been made by her fellow-servants. The accused was convicted. The butler, having taken a cupful of the tea (which was found to contain about three grains to the fluid ounce of arsenious acid in solution), at once experienced a very unpleasant taste, and in less than five minutes became giddy and sick; bloody vomiting and uneasiness in the fauces succeeded, and some illness was experienced for the next two days. No observation as to the flavour of the tea appears to have been made by the deceased, who took about the same quantity, and was very soon attacked with violent retching and burning in the throat. Dr. M'Crea, who visited her the same day, found her labouring under great headach, much suffusion, and some swelling of the face; injected conjunctivæ, constant itching of the eyebrows and forehead, white tongue (with red tip), incessant thirst, great pain in the stomach and bowels, shivering, and coldness of the surface. In some hours afterwards there was bilious purging, which did not recur.

Next day's history indicated, in addition to the preceding, great difficulty of breathing, insomnia, and constant agitation. On the fourth day there was a marked remission of all the symptoms, and the patient declared herself "much better." This calm was but of a few hours' duration; she sank, in a typhoid state, four days and twenty hours after the ingestion of the poison.

The body was inspected thirty-six hours after death, the weather (September) being cool, and was perfectly fresh. Externally, dark and desquamating areolæ of the eye-lids; sordes about the mouth. On the inside of each cheek was an elevated spot of ulceration, covered with a yellow coating, and a par-



tially red border. Æsophagus: epithelium of a yellowish brown colour.

Stomach: peritoneal coat rose-coloured; mucous coat, at the splenic end, of a brick-red hue, showing scattered petechial ecchymosis, and covered with an open net-work of vividly red streaks. Rugæ well marked. Pyloric end yellowish red; a small and solitary erosion of the mucous membrane, which was generally of natural consistence, though a little swollen; contents, a thick bloody fluid, in small quantity; submucous coat natural. Duodenum: mucous membrane brownish red; valvulæ conniventes darker, and in some places thickened, and showing petechial blotches. The jejunum and ileum presented similar appearances, increasing in intensity in the latter, as it approached the cæcum. There was also much submucous ramiform vascularity of both cæcum and colon; ileo-cæcal valve much thickened; mucous membrane dark reddish-brown (less so in transverse colon); rectum, some redness and petechial blotches.

*Respiratory Organs.*—Epiglottis nearly natural; pharyngeal membrane in the neighbourhood of the glottis deep red; that of trachea and bronchi vivid red, with frothy red fluid in the latter. Posterior part of both lungs much congested with dark blood, giving, on section, an appearance almost amounting to extravasation.

Heart and brain natural.

Dr. Beatty (then Professor of Forensic Medicine to the College) found no trace of arsenic in the stomachic contents, but discovered it in the tea, in the proportion of about three grains to the fluid ounce.

The deceased appears to have taken about twenty-four grains in solution.

This case exhibits very vividly the influence of the poison on the mucous surfaces.

CASE IX.—In reference to the following cases, I was consulted by my friend, Dr. Sibthorpe, assistant to the Lying-in Hospital. Mr. and Mrs. P., and their family, consisting of six

persons, residing near Dublin, were attacked after breakfasting on tea, &c., with symptoms of poisoning. The father (aged 56) and one daughter (aged 20) died after an illness of ten days and a-half, and thirteen days and twenty hours, respectively. The rest, who were mostly under fifteen years, recovered, having been affected during periods varying from three to twenty-five days. Some of the sufferers partook of tea *only*, and the two deceased were said to have taken it more freely than the rest. None of them observed any peculiar taste. After an interval (in one case of fifteen, in one of thirty, and in four of sixty minutes), they were seized with illness. The symptoms of the father were, first day, green vomiting, hoarseness, and thirst, with a remission towards evening; second day, same; third day, no vomiting, but thirst; fourth day, vomiting after *eating eggs and drinking porter*; fifth day, no vomiting, loss of appetite; seventh day, vomiting, with occasional bloody purging and tenesmus, short cough, and difficulty of breathing, which latter continued till death; eighth day, much vomiting, less purging, headach, great weakness, loss of sleep; ninth day, purging more bloody, pain in stomach, tenderness of epigastrium, painful micturition; eleventh day, he died, having been sensible to the end. It is to be noticed, that on the first three days, and on the fifth and sixth days of his illness, he went on a car to town, *to transact business*. His symptoms were manifestly aggravated by errors in diet. The illness of the daughter was characterized by vomiting, latterly of a green insoluble bile, purging, and collapse; there was subsequently desquamation of the cuticle of the face, with hoarseness, and towards the close small spots of purpura on the neck. On the day preceding death there were cough and muco-crepitant râles (without dulness) in the posterior part of the lungs. She sank with typhoid symptoms. Of the survivors, one had headach, and another giddiness, as the first symptom, and one *did not vomit for six hours*. One only had roughness of the throat; one, vesicles about the mouth; one had cough; one, *bright green* coating of



the tongue; one, swelling of the feet; two, partial paralysis (in one, of sensation in the fingers, and in the other, of motion in the lower extremities); three had hoarseness; three, desquamation of the cuticle (some of the hands, others of the neck and nostrils); five had thirst. The body of Mr. P. was examined forty-five hours after death (mean temperature of interval, 54° F.), and the abdominal viscera transmitted to me for inspection on the same day, when I found them exhaling a very putrid odour, which speedily increased. The liver, on the contrary, was but slightly putrid. The lining coat of the œsophagus presented black spots, about six inches from the stomach. The mucous coat of the latter organ was reddish grey, with various shades of brown (from decomposition). A black patch of the size of a sixpence was observed near the cardiac orifice, and near the pylorus several convex and slightly indurated spots of black extravasation, the altered blood on some of which could be easily wiped off, leaving behind a grey-coloured erosion. The membrane at the splenic end was soft; the contents consisted of some slightly bloody mucus. Duodenum: mucous membrane of upper part, thickened and granular. Jejunum: some staining of lining membrane from imbibition of contents, which were of a light brown, thick, and turbid. Mucous membrane of ileum in middle and lower part, red, swollen, and somewhat softened, with a little petechial ecchymosis. Pseudo-morbid staining of the mucous coat of the great intestine, from putrefaction. Contents small in quantity and reddish-grey, and moderate ramiform vascularity of submucous coat of both small and great intestine. Liver very soft (patient had lived freely). Kidneys slightly congested.

*Chest.*—Mucous membrane of larynx and bronchi dark red. Lungs natural. Coagulated blood in the ventricles of the heart in small quantity. No ecchymosis on the valves or endocardium.

*Chemical Examination.*—The contents of the stomach and those of the great and small intestines, separately examined, gave no trace of arsenic; absorbed arsenic was discovered in

the *liver* in the proportion of nine-tenths of a grain for the entire organ. The tissue of the small and great intestines, of the spleen, pancreas, kidneys, and lungs (individually examined), yielded no trace of the poison.

At the inspection of Miss P.'s body, ten hours after death, the following observations were made by myself:—Rigor mortis well marked; exterior of the body and muscular tissue unaltered, and continued so twenty-four hours afterwards. The intestines, on the contrary, had entered into putrefaction fifteen hours after death, and had made much advance on the next day, at which time the parenchymatous organs (liver, lungs, &c.) were still fresh.

*Alimentary Canal.*—The mucous membrane of the stomach was universally red (with an occasional tinge of orange), vividly so at the splenic end; the vascularity being chiefly of the fine punctated variety. Some florid petechial blotches occupied the summits of the rugæ; there was no black extravasation; ramiform injection of the submucous tissue, and of the large blood-vessels of the stomach; contents, a thick orange fluid. Mucous membrane of duodenum, olive, with tinge of red; that of the ileum (especially at the lower part) presented tracts of a dark purple, most intense on the valvulæ, with some petechial blotches: the last few inches betrayed a mottled redness, with enlargement of the mucous glands. The upper part of the small intestine showed much submucous ramiform injection; the contents were orange-coloured, and partly reddish. The lips of the ileo-cæcal valve were swollen and infiltrated; the mucous membrane of the cæcum vividly red, as was that of the colon and rectum. In the latter there appeared a slight aphthous ulceration; liver and spleen healthy; tubular portion of the kidneys injected with dark blood. There was a little urine in the bladder.

*Chest.*—Lining membrane of trachea and bronchi, red; tubes containing a little bloody froth; lung dark-coloured, presenting posteriorly indurated, dark-coloured, friable masses of the



size of a walnut, apparently of blood extravasated in the tissue, but yielding up their colour on maceration, which left behind a more solid structure than natural. The intervening portions of the pulmonary texture were red, engorged, and partly hepatised. The pericardium contained three ounces of amber serum. One of the carneæ columnæ of the left ventricle showed a small blotch of ecchymosis; none on the valves; a small quantity of coagulated blood, mixed with fibrine, occupied the ventricles. The blood in the right auricle and great veins was dark-coloured and fluid, but coagulated on being removed from the body, yielding a milky serum.

*Chemical Examination.*—The contents of the stomach, and those of the small intestine, afforded no indication of arsenic. The liver yielded a very small quantity (probably not much exceeding one-tenth of a grain for the whole), but still sufficient to give truncated octahedres by sublimation from copper, and characteristic precipitates with sulphuretted hydrogen and ammonio-nitrate of silver. The tissue of the small and great intestine, and that of the kidneys, spleen, pancreas, lung, and brain (separately examined), furnished no traces, nor could any be discovered in the subcutaneous fat<sup>a</sup>, bone, or blood.

In the case now described, the mischief appears to have probably arisen from the accidental contamination of the sugar (purchased at a suburban grocer and general dealer's), inasmuch as the same parcel of tea had been previously and since used without inconvenience, and as there was no reason to suspect the milk: none of these matters were, however, submitted to me for examination by the authorities.

CASE X.—I was consulted by my friend, Dr. Aquilla Smith, in the following case. He was kind enough to submit the stomach to my inspection.

<sup>a</sup> Millon (*Annales de Chimie*, February, 1847), found antimony, at the expiration of three and a half to four months, in the fat, bones, liver, and occasionally in the brain, of animals subjected to a ten days' course of tartar emetic in food.

A woman, past the middle age, committed suicide in Baggot-court, January, 1850, by swallowing arsenious acid (quantity unknown); death took place in sixteen hours; the symptoms were vomiting, purging, and thirst.

The body was exhumed at the end of a week, at which time it was perfectly fresh. I observed the following appearances in the stomach:

The peritoneal coat presented a diffuse redness, and, towards the splenic end, a brownish tint. There was a marked contraction of the muscular coat about three inches from the pylorus. The mucous membrane was found at the splenic end, of a mottled reddish brown colour, covering a stratum of coarse, ramiform, submucous injection, soft, and presenting a few petechial ecchymoses, and one or two erosions, with an undefined border, which exposed the unaltered submucous coat. The body of the organ exhibited an arrangement of dark, blackish-purple streaks of extravasated blood, deposited in the substance of a softened mucous membrane, and capable of ready removal by the nail. These streaks were then made up of a close aggregation of irregular blotches. Amongst these lines there were interspersed a few of the lighter-coloured petechial (fluid) blotches observed at the splenic end. The remainder of the mucous surface was of a brown red, which ceased abruptly at the contractions, between which and the pylorus the membrane was grey, and coated with viscid mucus of the same tint where untinged by bile. The mucous membrane generally was softened, not capable of being peeled off at the splenic end, but yielding on traction in the body and towards the pylorus, flaps of one quarter and one-half of an inch respectively. The submucous coat, except in the cardiac region, seemed free from injection. There was no trace of true ulceration in any part of the organ. The contents were formed of a uniform reddish fluid (twelve fluid ounces) of the consistence of thin gruel, and depositing brown flocculi; this fluid was of an acid reaction, and included a considerable quantity of insoluble hematosine. The



mucous membrane of the duodenum was reddish, and apparently a little thickened, and presented an oval ulcer of the size of a sixpence, with a thick, elevated edge, its surface exposing the submucous, and in the centre the muscular coat. As the patient had previously complained of pain in the region of the stomach, it is probable that the above ulcer was the result of antecedent disease. Arsenious acid was freely indicated in the contents of the stomach.

I shall now state, as bearing on the antiseptic influence of arsenic, that eight weeks after death (the stomach having been kept in a loosely covered vessel), the morbid appearances were not materially altered; the organ exhaled but a faint sickly odour, and less than it previously had, and the mucous membrane was rather firmer than before. Nine weeks and a-half after death, the black extravasation was quite distinct; in twelve weeks little changed, and the coarse ramiform injection slightly altered: the tissue was neutral to litmus. After this the latter, though quite firm, became ammoniacal; odour sickly, and quite peculiar. Nineteen weeks after death, the three outer coats of the organ, and the pyloric mucous membrane, were quite firm. Twenty-one weeks, black extravasation still visible; organ green, with the ordinary fœtor. In thirty-two weeks the parts had somewhat desiccated, and were now attacked by small flies, numerous pupæ of which were discovered on the surface. In thirty-four weeks (the tissue being drier) a marked alliaceous odour was perceptible. The surface of the organ was covered by a brown powder, which (viewed by the lens) consisted of a multitude of transparent mites, or acari, in lively motion, in which state they were still to be found at the end of forty-two weeks, when the garlic smell was as strong as ever. Numerous small flies also had been attracted to the vessel, and remained in the interior for several days with perfect impunity.

CASE XI.—Anne M'Enerny was indicted at the Cavan Lent assizes, 1844, for the murder of her son-in-law, James Brady.

The parties had disagreed relative to the marriage portion. The deceased had been in good health previously to his having partaken of supper given him by the prisoner, which consisted of potatoes and buttermilk. *Three hours* after the meal (having in the mean time retired to rest), he was seized with vomiting and shivering, which did not last long, but was renewed in the morning, recurring when he drank; subsequently, burning in the stomach, great tenderness of the epigastrium, and cramps. On the last day, coldness of the extremities, sunken countenance, failure of vision, and tympanitic belly. Death took place after an illness of sixty-three hours. The inspection was performed by Dr. Nixon, of Ballyjamesduff, and took place forty-eight hours after death. The body, and particularly the abdomen, was inclined to putrefy (weather cool; mean temperature 55° F.) The peritoneal coat of the stomach much injected; the mucous membrane was much inflamed, particularly at the cardiac end. In this part there were streaks of coarse and dark-coloured ramiform submucous injection; numerous slightly depressed blotches of black ecchymosis of variable size, larger towards the cardiac end, were scattered over the surface; some of them surrounded by red areolæ. The membrane (at this point only) was much softened. Four days after death, the organ had somewhat advanced in putrefaction, and the mucous coat had now become softened, and slightly emphysematous; flaps on traction were furnished in the pyloric end and body, of an inch and one-eighth of an inch respectively; none could be raised at the splenic end.

The contents of the stomach (acid to litmus) consisted of four ounces of a viscid, turbid, reddish brown fluid, evidently containing blood, and having a peculiar *rancid* and fetid odour. They afforded no decisive indication of arsenic. A few masses, however, of the poison, were scattered over the mucous surface, on which there was no tenacious mucus. No other parts were forwarded for chemical examination. The chief feature of interest



in the above case is the long interval which elapsed between the ingestion of the poison and the incipient manifestations of its action. The trial was stopped by the presiding judge, on the ground of deficient proof of administration.

CASE XII.—I am indebted for the following case to Dr. Leeson :

M. G., aged 56, a hardware dealer, committed suicide by swallowing arsenious acid, in April, 1845. The dose, as far as could be ascertained, was about one and a-half ounces. He sought medical advice three hours from the commencement of his illness, when the hydrated sesquioxide of iron was freely administered, with relief to the vomiting. Death took place in twelve hours after the ingestion of the poison. The symptoms were: vomiting, streaked with blood, purging, dark areolæ around the eyes and mouth. There was neither pain on pressure of the epigastrium, stupor, nor convulsions. The stomach, when submitted to my examination, exhibited the following appearances :

Mucous membrane of the splenic end and body of the organ:—numerous slight elevated streaks, in the former rusty coloured (from oxide of iron), in the body red, and covered by closely adherent patches of a brownish white matter. The pyloric end showed a couple of large rounded patches of elastic coriaceous fibrine (admixed with particles of arsenic), closely adherent to the mucous membrane, which was found beneath, much swollen, rough, and vividly red. Elsewhere the lining coat betrayed no deviation from the natural colour, and yielded, on traction, a flake of one quarter of an inch at the splenic, and one-half of an inch at the pyloric end. There was no black extravasation, ulceration, or erosion. Submucous coat, some ramiform injection at the splenic end; elsewhere natural. The stomachic contents turbid, and of a chocolate colour (iron); yielded arsenic on examination<sup>a</sup>. Colon

<sup>a</sup> After some time the contents yielded, when filtered, very little arsenious acid, the latter having become united with the oxide.

much contracted; spleen rather soft. There was urine in the bladder.

CASE XIII.—In the latter end of May, 1850, I was called out of town to visit two children of Mr. R., to each of whom a teaspoonful of rat powder (a mixture of arsenic and flour) had been given the preceding evening, at bed-time, in mistake for magnesia. The younger was a boy, aged two years, the elder, a girl, of four, both previously healthy; they had dined, about four hours before, on meat and vegetables. Neither of them complained of the taste of the dose, which was administered with milk and sugar. It was stated that the younger drained the cup from which his sister had taken her dose, and that the latter had, perhaps, dined more heartily than her brother.

The boy awoke an hour afterwards, with vomiting, which recurred at intervals throughout; he was restless and cold, the countenance sunken, with dark areolæ around the eyes, and shortly before death he was sleepy. He did not complain of pain, except when questioned, and then referred it to his throat, which Dr. Maguire, of Chapelizod (who first saw him), states to have been inflamed. There was no purging. He expired in nine hours.

He was sedulously attended by Dr. Maguire, who administered emetics of sulphate of zinc, followed by demulcent fluids. Fragments of the poison, suspended in the latter, were ejected, five or six hours from the commencement of the illness, and were found to be still unmoistened in the centre.

*Inspection thirty and a-half Hours after Death.*—(Mean temperature, 56° F.) There was a good deal of livor posteriorly; rigor mortis was well marked<sup>a</sup>; abdomen green from putrefaction; a disagreeable odour about the mouth, which was perceptible eighteen hours previously. No interior examination was permitted.

<sup>a</sup> It is laid down by physiological writers that this condition is very transient in young subjects. This statement, viewed as a general rule, requires confirmation.



The sister was *aroused by the noise* which the illness of her brother had created, *two hours* after having swallowed her dose, when her father proceeded to the employment of vigorous measures, consisting of an emetic, followed by repeated albuminous draughts. She had no purging, and was inclined to sleep when permitted; and when thirteen hours had elapsed, I found her cheerful, skin warm, pulse 160, and very weak; tongue coated white, with scattered red papillæ, resembling the tongue of scarlatina; some thirst and occasional green vomiting; urine scanty, and depositing lithate of ammonia. In twenty-four hours, face flushed, eyes rather injected; pulse still very quick; in one day and a-half she had improved; pulse 124, and stronger; urine still scanty. In two days and a-half, restless night, frequent vomiting of green insoluble bile since last visit; pulse 132, but afterwards rose to 160; restlessness; urine less scanty. Four days and a-half:—copious vomiting yesterday, matter ejected green and viscid; bowels freed by injection, with much relief; less thirst; pulse 96, soft; still vomits on drinking; tongue loaded. In six days and a-half, convalescent. Some days afterwards she had quite recovered. None of the matters discharged by the deceased child were preserved for examination. The matters vomited by the girl at intervals, from twelve to thirty-six hours after the poison had been swallowed, afforded no trace of arsenic. None was discoverable in the small quantity of urine passed up to the fourteenth hour; that of from fourteen to thirty-six hours yielded faint and dubious indications; in the secretion passed on the fifth day, none; nor yet in the fæces passed at about thirty-six hours.

CASE XIV.—I am indebted to Mr. Read, surgeon to Mercer's Hospital, for the following case:

J. G., aged 33, a servant, and previously healthy, attempted self-destruction on February 16, 1841, by swallowing arsenious acid in tea, with which he had agitated above an ounce of the poison for twenty minutes. No peculiar flavour was at first perceived, but towards the end of the draught

he found it nauseous, but could not positively state that he experienced any special taste. In about five minutes a peculiar tingling sensation commenced in the left arm, which lasted for about three quarters of an hour; this was followed by nausea, vomiting, and headach, which continued till next day, when much thirst was added, with hoarseness, lachrymation, and swelling of the eye-lids. On the fourth day, having almost completely recovered, he again took arsenious acid, to the extent of two tea-spoonfuls, in coffee containing milk and sugar, the mixture having been well stirred. In about half an hour he experienced headach and nausea, followed by vomiting of green bilious matter and ropy mucus, which continued for thirty hours. There were also present cramps, some collapse, constriction of the throat, hoarseness, and burning in the tract of the œsophagus; the last symptom continued till the sixth day. Second day: a line of excoriation on the integument at the external angle of each eye, and desquamation of the cuticle of the eye-lids, with redness of the latter; an eruption of pustules about the angles of the mouth; redness of the fauces, with aphthous ulceration. Third day: cough, with yellowish white expectoration, and bronchitic râles in the chest; difficulty of micturition (without pain); tingling sensation in axillæ (which lasted eight days); heat of skin, and quick pulse. Fifth day, numbness in thighs and calves of legs. Eleventh day: anæsthesia of fingers, and partial paralysis of flexors of forearm; a similar condition shortly afterwards attacked the lower extremities, and was accompanied in both by pain persisting for a few days.

In five weeks from the commencement of the illness the skin of the entire body had desquamated; most remarkably so on the hands. In six weeks the paralytic condition of the flexors of both extremities, which continued unabated, was now accompanied by soreness on pressure. In two months and a-half the patient was still unable to stand without support. In eight months the paralysis of sensation and motion, the soreness on



pressure of the muscles, and the impediment in making water, still continued, although in a less degree. In twenty-three months, *nearly* recovered. Some time subsequently he was quite well.

*Chemical Examination*.—Six ounces of urine afforded no evidence of arsenic.

The preceding history furnishes an interesting example of the remote effects of arsenic on a large number of organs, and illustrates its influence on the digestive, cutaneous, and nervous systems respectively. The disturbance of the functions of the latter system continued for at least two years. The first dose of the poison, although much larger than the second, not combated, as was the latter, by any remedial measures, and having been retained for three-quarters of an hour, was followed by effects much less severe, extended, and persistent. On neither occasion was there purging.

The paralysis was treated by strychnia, warm baths, and purgatives. The constriction of the throat and hoarseness were much relieved by a moderate blood-letting.

CASE XV.—Miss D., aged 18, June 16, 1838, committed suicide by swallowing arsenious acid; dose unknown. The symptoms were, vomiting, constriction of the throat, stupor, and when near death there were dark areolæ around the eyes; there was no purging: death in thirty-two hours. In addition to other measures, the medical attendant administered sulphate of copper, followed by albumen. The contents of the stomach indicated the presence of *arsenite of copper* (Scheele's green) in small quantity, a result of the action of the arsenious acid on the oxide of copper of the albuminate.

CASE XVI.—In February, 1848, I was consulted by Dr. Trotter, county Meath, relative to the following occurrence:—five persons partook of a flour cake made with soda; two of these died in from eight to ten hours. The symptoms were, burning in the throat, vomiting, and pain in the abdomen: in two of the cases the symptoms commenced half an hour after

eating; in one (a child of ten) the stomach and intestines were found inflamed; their contents consisted of a thin fluid, intermixed with curd of milk. The cake, soda, and flour, were submitted to me for examination. I found arsenic in the first, the two latter contained none, while there was *soda* also in the cake. It hence appeared that this was not an accidental poisoning. Sufficient evidence, however, could not be obtained to implicate the suspected party<sup>a</sup>.

For the following case I am indebted to Dr. Groves, R. N.

CASE XVII.—M. B., aged 30, swallowed in gruel and porter nearly a tea-spoonful of arsenic in mistake for ginger. About an hour afterwards she had some vomiting, which soon became green and copious, and produced great pain in the throat and chest, and at midnight she was seized with violent pain in the abdomen, principally in the hypogastric region; burning sensation in the stomach, and hoarseness, succeeded, and sense of constriction in the œsophagus; itching about the eye-lashes; dimness of sight; cold, clammy perspirations; sleeplessness, and sooty taste in the mouth; vertigo; ringing in the ears; tingling in the limbs; paralysis of the legs; sensation as if cold water were poured down the back. For several succeeding nights she had fits resembling epilepsy, except in the absence of frothing at the mouth.

On the fourth day there was epigastric pain on pressure; subsultus tendinum; great thirst; pain in the stomach when she drank; vomiting had ceased; tinnitus aurium and tingling in the limbs disappeared. The case was not further under observation.

On the next case I was consulted by Dr. Reid of Kilkeel.

CASE XVIII.—Martha Edmonds was indicted at Downpatrick Summer Assizes, 1840, for the murder of her husband, a pensioner. The latter and a neighbour were attacked with

<sup>a</sup> The necessity of examining all the ingredients of suspected food in criminal cases is well shown in the above instance.



illness shortly after having partaken of punch made by his wife. The husband complained at once (and before any suspicion had been excited) of the "nauseous" taste of the liquor, and said he could not drink it. His neighbour also objected to it on the same grounds. He died in from eight to nine hours afterwards, with vomiting (in part bloody), and pain in the head and belly. The survivor (an adult female) experienced burning of the fauces, vomiting, violent pain in the abdomen, cramps, and incessant thirst. She was six weeks in arriving at perfect recovery, previously to which general desquamation of the cuticle took place. In the deceased, the stomachic contents consisted of three pints of a dark, bloody fluid, in which I detected arsenious acid, in the proportion of three and a half grains to ten ounces. No other parts were sent for examination. A *duck*, to which two table-spoonfuls of the contents were given, was seized on the same evening with paralysis of the legs, and an effort something resembling vomiting. It lived three days, during which time it *cast most of its feathers*.

For the following history, and for an opportunity of inspecting the stomach, I am indebted to Mr. Fox, F. R. C. S.

CASE XIX.—Mr. S. M., in consequence of mental depression, committed suicide May, 1843, by swallowing white arsenic. The dose was considerable (nearly an ounce having been found in the stomach). Death took place in about seven hours. Symptoms: vomiting of green matter for the first two and a half hours; subsequently, bilious purging; no thirst, pain of stomach, nor tenderness on pressure; extremities warm; countenance not sunken; pulse weak and slow; occasional sleepiness.

*Inspection, sixty-three Hours after Death.*—Body quite free from putrefaction; a very peculiar odour on cutting into the abdominal muscles and cavity. Stomach: a good deal of scarlet capilliform injection beneath the peritoneal coat; same in the omenta; mucous membrane of the body and splenic end of a light reddish brown, with some darker patches; a beau-

tiful vivid-red striated vascularity of the pyloric fourth; in the splenic end were numerous erosions of the mucous coat, chiefly rounded, with some streaks of varying size; edges undefined, and destitute of redness or induration; bottom formed by the submucous coat; no trace of black extravasation; mucous coat of splenic end softened (by imbibition of fluid contents); that of pyloric not; little adherent mucus, but many patches of arsenious acid admixed with that secretion were scattered over the surface; a good deal of ramiform injection of the submucous coat, chiefly of the splenic end. Contents of stomach: two pints, faintly acid, and of a dilute brown colour, including much viscid mucus, exhaling a sour and a very peculiar odour, and depositing curdy-looking masses on standing. Arsenious acid was present in solution. Duodenum: lining membrane reddish brown; a few small abrasions. Heart: cavities engorged with blood.

CASE XX.—In February, 1843, four persons swallowed arsenic, introduced in mistake for soda into a cake. The latter was said to have a peculiar bitterish and disagreeable taste, in consequence of which two of the parties ate but little. The symptoms produced were vomiting and purging, and pain in micturition. When seen by the late Dr. O. Curran, the pulse was thready, 120–130, and in two somewhat intermittent; their countenances pale, contracted, and anxious, and their extremities cold: in two there were cramps, violent burning in the epigastrium and throat, with constriction in the latter, and *bloody urine*. Emetics, followed by copious draughts of tepid water, were administered; and about an hour after the poisoning the extemporaneously prepared<sup>a</sup> hydrated sesquioxide of iron was given copiously; to some of them the *dry oxide*. Immediate relief was experienced to the pain in the stomach by the use of the former, so much so that the patient called for its

<sup>a</sup> By precipitating the tincture of the muriate of iron by ammonia, and decantation.



repetition, and in half an hour the first-named symptom had disappeared; the *dry oxide* did not produce any material benefit. The fæces of one of the patients passed on the fourth day indicated the presence of arsenic in small quantity, and traces were discovered in the urine on the fourth day.

CASE XXI.—Dr. Mason, M.R.C.S., requested my assistance in the following occurrence:

Five persons partook of soup which had been seasoned, by mistake, with oatmeal intended for poisoning rats, and containing arsenic. In about half an hour, one of the parties, a female, was attacked with burning of the throat and pain in the stomach and bowels. This was followed by severe pain in the head and across the eyes, the former of which continued till next day. She was attacked subsequently with bronchitis, which slowly yielded to treatment. Another of the sufferers was seized, almost immediately after taking the soup, with headach, and a feeling of distention in the eyes; in a quarter of an hour, vomiting and burning in the throat. He had subsequently mild conjunctival inflammation and general debility; and finally bronchitis, which readily yielded to treatment. A third person was attacked in half an hour with nausea, followed in two hours and a-half by burning of the throat, severe pain in the head, and scalding of the eyes. She did not vomit till sulphate of zinc had been given. She had subsequently pain in the knees and loins. A girl, who also partook of the soup, vomited *immediately*, and recovered. The treatment consisted in emetics, followed by the hydrated sesquioxide of iron, extemporaneously prepared, from which latter much and immediate relief to the pain in the stomach was experienced.

The facts contained in the foregoing histories furnish matter of practical interest, and might be profitably generalized, did space permit. I shall, however, offer but a few leading reflections. The first circumstance which demands attention is the impression of the poison on the organs of taste, concern-

ing which much difference of opinion exists<sup>a</sup>. Conclusions upon this subject are most valid when drawn from the observation of actual cases of poisoning<sup>b</sup>. These leave no doubt that, while in some few such an impression is made, in the great majority there is none. Thus, of fifty-two cases here referred to, it was absent in thirty-eight, although in several of these the poison was in solution. In five, however, where no suspicion had been previously excited, a disagreeable flavour was experienced<sup>c</sup> in the act of eating the food, which caused two to lay it aside. That such impressions are the result rather of a peculiar susceptibility of the organs of taste in certain persons than indicative of an invariable sensible property of arsenious acid, I am disposed to believe, from the fact, that, in the above cases, some who partook of the same food experienced no such effect. Although, however, there may be no evidence that the poison generally exerts an *immediate* influence, yet a rapid *after impression* (burning) in the throat and tongue<sup>d</sup> is not unusual, and would probably be more frequently observed were it not that the poison is often enveloped in viscid food. Whether or not such an impression may be designated as *taste*, it certainly is not (as some conceive<sup>e</sup>) of the nature of inflammation, when it presents itself (as sometimes occurs) in the course of a few minutes, or in those instances in which it has arisen without the poison having been swallowed<sup>f</sup>.

<sup>a</sup> See the conflicting opinions of Orfila (*Toxicologie Générale*) and Christison (*On Poisons*). The question of the taste of arsenic was mooted in the affair of the Abbé Gothland, which still creates such a sensation in France.

<sup>b</sup> I must confess that the experiments which have of late years been resorted to for settling this point do not appear to me satisfactory, as few are willing to risk the application of a sufficient quantity to the tongue to furnish a trustworthy result.

<sup>c</sup> Designated by the respective parties as “nauseous,” “bad,” “queer,” “bitter and nasty.”

<sup>d</sup> As in the case of some vegetable acids.

<sup>e</sup> Christison, *op. cit.*, fourth edition, p. 254.

<sup>f</sup> In Case xx., the medical attendant tasted the poisoned tea (three grains



The salivation occasionally noticed (two cases) is, doubtless, similar to the spurious form which takes place, when a strong impression is made by any poison on the lining membrane of the mouth and throat. In a few of the foregoing instances vomiting occurred almost immediately. The mean interval which elapsed, previously to the latter taking place, was thirty-two minutes, the longest, six hours. In the latter case headach supervened in an hour. This symptom, with giddiness, is often amongst the earliest indications, and frequently precedes vomiting for a considerable time. The mean duration of twenty-two fatal cases was fifty-seven hours and a half; the shortest, five hours and a-half.

The symptoms<sup>a</sup>, it will be perceived, were various, both as to their nature and mode of combination, more especially the latter. Good illustrations are afforded of the two commonest forms of arsenical poisoning; the one, in which the mucous and cutaneous surfaces are chiefly involved, and the other where the phenomena, having been in the first instance of this nature, are succeeded by disturbance of the nervous functions, chiefly of the spinal cord, as indicated by paraplegic affections more or less intense, and sometimes long persistent. In none was there an example of that rarer and rapidly fatal form, in which the powers of the heart and sensorium are prostrated by the influence of the poison, and in which the primæ viæ are often uninfluenced. It deserves notice, in a medico-legal point of view, that in two cases (severe, and subsequently fatal) the patients retained sufficient

to the ounce) but *without swallowing any*. “He perceived nothing at first, but afterwards felt burning in his throat.” The same occurred also in a Welsh case.

<sup>a</sup> Of individual symptoms, vomiting was the only invariable one. Of sixty cases, there was purging in sixteen; in fourteen, thirst; in eleven, pain in the belly; in eight, burning in the throat, headach, and collapse; in six, cutaneous eruptions; in five, epigastric tenderness, injection of the conjunctivæ, and desquamation of the cuticle; in three, cough, fainting, sleepiness, and painful micturition; in one, priapism.

strength (in one) to leave the house, and (in the other) in addition, to engage more than once in the transaction of business. In one case (the patient having slept subsequently to the dose), no symptoms presented themselves after the lapse of two hours, when vomiting was produced and repeated under the influence of emetics only. Whether this was owing to the influence of sleep, or to the envelopment of the poison in food, would be difficult to determine.

I shall not advert to the subject of treatment, further than to draw attention to the relief which followed, in eight instances, from the recently prepared hydrated sesquioxide of iron<sup>a</sup>, while that from the oxide was but trifling. This remedy should not, of course, be allowed to supersede an efficient evacuation of the stomach, and will necessarily fail in many cases, either from the interval which may have elapsed having permitted the absorption of a fatal dose of the poison, or from the common and obstinate adhesion of the latter to the mucous surface. The oxide should be prepared by precipitation with *ammonia*, as that thrown down by potash is less efficacious. The morbid alterations observed in the several instances narrated are deserving of attention; but, having already given a general survey of them on another occasion<sup>b</sup>, I shall notice them but briefly here. The only one which can be considered as exclusively the result of its local action on the mucous surface of the stomach is characterized by great and fungous thickening, in patches or ridges, with adherent arsenic, or, rarely, coriaceous lymph. (Case XII.). The other changes,

<sup>a</sup> According to Wittstein, the hydrated peroxide loses its efficacy by being kept under water, owing to its acquiring a crystalline condition. This seems opposed to the observation of Bunsen, who found that hydrated oxide of iron, which had been discovered enclosed in a cavity of a mass of travertine, retained its antidotal virtues intact. Should further experience support the view of Wittstein, the oxide may be readily prepared extemporaneously by the action of ammonia on muriated tincture of iron and decantation.

<sup>b</sup> Medical Press, April 17, 1850.



equally producible by its remote influence consequent on absorption, are injection of the various forms (chiefly punctated) with petechial blotches. It is doubtful whether the black extravasation (which ends in erosion) may also result from the remote influence of arsenic; if not, it seems to arise from the general excitement of the mucous surface, and not from the lodgment of masses at the particular points affected, as *fluid* irritants produce the same result.

In no case was there true ulceration of the stomach or intestines. I have known the latter lesion to occur, in a marked degree, in the great intestines, where arsenic was applied externally. I have also found ulcers on the interior of the cheek, in arsenical poisoning of four and a-half days' duration.

The lungs, it will be seen, were, in many cases, much engorged, and the bronchial mucous membrane inflamed. The heart, in a few, exhibited petechial ecchymosis on the endocardium, &c. The condition of the blood was variable; while often fluid and dark in the great veins (as is common in other forms of death), it was sometimes coagulated in the heart<sup>a</sup> and great arteries. In one instance, though fluid in the vessels (ten hours after death), it coagulated on being withdrawn.

The influence of arsenic, in retarding or modifying decay of the body, has long attracted attention, and has been strikingly displayed in many late exhumations.

Where there has been an opportunity of inspecting the entire body in the foregoing cases, the following conditions have been noted:

1. Complete preservation of the whole, during periods of observation of nearly three days, under circumstances favourable to decomposition.
2. Rapid putrefaction of the entire, during cool weather.

<sup>a</sup> And sometimes fluid in one cavity while coagulated in another.

3. Preservation of the stomach and intestines, the body decaying as usual<sup>a</sup>.

4. Rapid decomposition of the alimentary canal, the body remaining unaffected<sup>b</sup>.

Where the *digestive tube* only was under observation, I have obtained the following results :

(a). Almost complete preservation of the stomach (apart from its contents) during four weeks, followed by modified decay during eight ; subsequent ammoniacal and ordinary putrefaction, and finally drying of the tissue, with extrication of arseniuretted hydrogen.

(b). Rancid putrefaction.

This term I venture to apply to a singular condition, characterized by a very peculiar odour (like that of fatty substances undergoing slow decomposition), and by a strong and persistent acid reaction<sup>c</sup>. The tissues so affected retain their consistence for a long period, but finally become softened and discoloured in their aspect.

The *modus operandi* of the poison, in the exercise of its antiseptic powers, has not been hitherto satisfactorily explained.

That arsenious acid enters into direct combination with animal proximate principles, there is no reason to doubt ; and that such union, *per se*, is adequate to effect this preservation, is probable from the analogous case of the metallic compounds of albumen ; hence, most likely, the complete preservation of the *stomachic contents* for an indefinite period, which I have

<sup>a</sup> This was observed in Case I., at forty-six and seventy-four days after death.

<sup>b</sup> Case of Miss P. The intestines were in an advanced state of putrefaction thirty-four hours after death.

<sup>c</sup> An arsenical stomach in my possession has retained this condition undiminished for more than four years ; I have also noticed it in a liver which, having been long dried, resumed this form of decay on being remoistened.



sometimes noticed (Case VI.). The arsenic deposited by the blood in the organs of the body I have also found (in the case of the liver) to enter into combination with the tissue (see chemical examination of Case III.), and such union has been even viewed by some modern chemists, who assume a summary and exclusive jurisdiction in the domain of physiology, as the cause of its noxious action; an assumption which, independently of other considerations that might be offered, is sufficiently refuted by the fact, that some of the organs that suffer *most* receive the *smallest* amount of the poison, and that the quantity, in any instance, is utterly insufficient to combine with such a portion of the tissue, as consequently to arrest or materially disturb the functions of the organ. Reflection on the results at which I have arrived in the examination of the different organs, satisfies me, that the preservative action of arsenic is often to be referred, rather to a catalytic or disposing influence, in virtue of which such changes are produced, either in the molecular condition of the textures, or in the grouping of their chemical atoms, as suffices to impress upon them a new and more stable character. Dr. Christison<sup>a</sup> appears to view this as the probable explanation of the phenomenon, as it regards the body generally, exclusive of the alimentary canal.

I am disposed, however, to give this view a more general application, from the significant fact (noticed, I believe for the first time, in this paper), that the preservative influence is sometimes visible, where the tissue (*e. g.* of the stomach or intestine) *has excreted the entire of its arsenic.* (Case I.) It would hence appear that, the disposing influence having been once exerted, the preservation of the tissue is maintained, irrespective of the subsequent retention or expulsion of the poison<sup>b</sup>.

On the other hand, where, from the influence of the poison

<sup>a</sup> *Op. cit.* p. 358.

<sup>b</sup> Thus, while in Case I. it was expelled, in Case v. it was retained in the tissue of the stomach.

on the blood during life, or from other obscure causes, a tendency to decomposition is induced, the presence of absorbed arsenic in the tissue will not prevent the latter. Thus in Case II., although all the organs putrefied with great rapidity in cool weather, I detected arsenic in one of them<sup>a</sup> in full quantity. It was absent in other parts not more decomposed. In some instances, the tendency to decay thus induced is less energetic, and attacks only those organs which, from their structure, are ordinarily more obnoxious to decomposition, as the alimentary canal.

The distribution and elimination of the poison are practically deserving of notice. The blood deposits that which it has received, with comparative rapidity<sup>b</sup>. The amount, however, allocated to the different organs differs materially. The liver (or perhaps the kidney) receives most, in proportion to its mass; next, probably, the muscular tissue; lastly, the structure of the lung, and other parts. The quantity and constancy of deposition in the osseous system has yet to be determined. I could not discover a trace in the *skin, subcutaneous areolar membrane, or fat*, in a case fatal in seven hours, although freely indicated in the muscular tissue and liver. Whether this obtains as a general rule must be decided by future experience. Should it prove to be so, the frequency of cutaneous affections in arsenical poisoning will suggest the interesting inquiry whether the disturbance of the functions of a special organ can be produced without the transit of any poison through its structure, or whether such transit, if it take place, is necessarily followed by deposition. The interval, after which an appreciable deposit takes place in the tissues, probably va-

<sup>a</sup> The liver.

<sup>b</sup> In a case of poisoning by acetate of lead, in which the poison had been re-administered twelve hours before death, I was unable to find a trace of the latter in the blood of the heart, although the tissue of the organ gave indications. In Case IV., fatal in nine hours, arsenic was detected in the blood, while in another, fatal in seventeen to twenty hours, none was discovered; the quantity, however, examined in the latter case, was small.



ries<sup>a</sup>. Thus, while in one instance, fatal in nine hours, no satisfactory evidence of arsenic could be obtained in the muscular structure, I discovered it without difficulty in that of another, after an illness of seven hours, in the proportion of one-thirteenth of a grain to the pound.

I shall next proceed to state the results of several careful investigations which I have lately instituted in reference to the *amount* discoverable at various dates in the liver<sup>b</sup>. I must premise, that in an experiment by the method of Reinsch, on a pure solution of arsenic, conducted with great precaution to avoid loss, I could recover by gradual, full, and continued heating of the copper foil, only *three-fifths* of the arsenious acid employed. Hence, although the *whole* arsenic is *precipitated*, little more than *half* is *ultimately obtained*.

Estimating the average weight of the liver to be three and a-half pounds, I obtained for the entire organ the following quantities at the respective periods undernamed:

Obtained.		Total Arsenic deposited in Liver.
5½ to 7 hours,	0·5 gr. (Hence 3 : 5 :: 0·5 : 0·8) = 0·8 gr.	
8¾ „	0·7 „	= 1·2 „
15 „	1·2 „	= 2·0 „
17 to 20 „	0·8 „	= 1·3 „
10½ days	0·9 „	= 1·5 „
14 „	0·1 „ (q. p.)	= 0·17 „

If these quantitative results should prove uniform (which seems improbable), the maximum amount of deposition will

<sup>a</sup> The question as to the amount deposited in this organ, after a given interval, became of considerable moment in the important case of Ann Merritt, owing to the speculative opinion of a medical witness, commented on by Mr. Bright, M. P., during the debate in the House of Commons on the abolition of the punishment of death. See Medical Gazette, August 16, 1850.

<sup>b</sup> The portion to be examined was first carbonized, in a close vessel with a receiver, by pure sulphuric acid, as I find that mere boiling with muriatic acid does not extract the whole of the arsenic; Fresenius' chlorine method is a good one, but tedious. I think it probable that, where Reinsch's plan has been followed, the whole arsenic deposited on the copper might be obtained by momentary immersion in strong pure nitric acid; the solution, on evapo-

have been attained in fifteen hours. Further researches are, however, necessary. Various considerations, and especially the rapid disappearance of poisons from the blood, lead to the inference that the deposition of these agents in the various secreting organs, and in the muscular and other tissues, so far from being the cause of their formidable remote effects, is rather to be viewed as a beautiful provision for their allocation to parts where their presence is productive of least danger.

The liver is probably<sup>a</sup> the organ in which the poison is discoverable after the longest interval. The period at which elimination is complete is doubtless variable; thus, in an observation by my friend, Dr. Taylor<sup>b</sup>, the liver had evacuated its arsenic after a seven days' illness. I found the poison in the same organ, in cases which had survived respective periods of ten and a half, eleven and a half, and fourteen days (in the two latter in small quantity). In the last-named period it could not be discovered in the tissues of the intestinal canal, kidneys, lung, &c. It would appear, therefore, either that these organs precede the liver in expelling their contained arsenic, or, if the act be simultaneous in all, they have earlier ceased to evince its presence, owing to their having originally received less. If the view of simultaneous excretion be adopted, it will be necessary to assume, in some cases, that there occurs, moreover, a transference of the absorbed poison from *other organs* to the *liver*, in order to account for its existence in the latter, in nearly full quantity, so late as the fourteenth day<sup>c</sup>.

ration, being converted into sulphate of copper and arsenic acid, the oxide of copper then removed by boiling potass, and the filtered solution deoxidized by sulphurous acid, and finally precipitated by sulphuretted hydrogen.

<sup>a</sup> What the relation of the muscular tissue may be to the latter organ has yet to be determined. In the case fatal on the fourteenth day (where arsenic existed in the liver) I had reserved some muscular structure, which was, however, unfortunately lost.

<sup>b</sup> Guy's Hospital Reports, vol. vii. p. 14.

<sup>c</sup> This is, I believe, the longest period of illness after which *absorbed* arsenic has been discovered. I exclude the case given by Bonjean, in which



The leading channel for the escape of poison (so far as our present knowledge extends) is the urine. In Case XIII. I examined this secretion at intervals from the fourteenth hour to the fifth day, and but *once* detected indistinct traces of arsenic. This probably arose from the minute quantity absorbed, which was still sufficient (in conjunction, perhaps, with the effect of continued evacuation of the stomach) to produce gastritic symptoms. In another case no trace could be had in six ounces of the urine, passed on the sixth day.

The detection of absorbed arsenic in the various organs has raised an important inquiry, which has lately been revived by Dr. Kidd of this city, in his interesting communication on imputed poisoning<sup>a</sup>. Dr. Kidd has shown that where there has been an injection of arsenious acid in solution into the stomach after death, the poison may be discovered some time afterwards in the adjacent viscera, and even in the muscular tissue of the fore-legs. Without denying the probability of cadaveric imbibition by neighbouring organs in the human subject, I must observe, that it is not likely to take place to such an amount as to present material difficulty in medico-legal inquiries. For, in Dr. Kidd's experiments it may be noticed, that the quantity of the poison (introduced also in solution) was very large in proportion to the size of the animals, and the time allowed for exosmosis considerable. I conceive that the difficulty may in general be satisfactorily eluded by a *comparative quantitative* examination of the poison in the interior and exterior of the impregnated organs, or of that in near and distant parts; the amount discoverable will, in post mortem imbibition, be much

a single dose of three-fourths of a grain of arseniate of soda was discovered a month afterwards in the urine, and hence, if the statement be correct, must have existed in some of the organs up to that period!

<sup>a</sup> Dublin Quarterly Journal of Medical Science, August, 1850. This paper was drawn up in especial reference to the case of Mr. Bleasby, Armagh, where a post mortem introduction of the poison was suspected.

greater than in vital absorption<sup>a</sup>; and lastly, a careful consideration of the symptoms and morbid changes, will complete the distinction. These circumstances will require the closest attention where a considerable interval has elapsed previously to exhumation.

With regard to the detection of poison in the primæ viæ, it is interesting to notice its discovery in the fæces on the fifth day in one case, and in the contents of the colon on the twelfth day, in another. I have found that, where the quantity of arsenic is very small, and combined with a large amount of animal matter, carbonization by sulphuric acid is an indispensable preliminary. I indulge the hope that the reflections now offered may lead to further researches on the various questions in the medico-legal history of arsenic which still demand elucidation. Should this result be obtained, I trust that the facts embodied in the present communication may furnish some assistance.

<sup>a</sup> This is evident from the statement of Dr. Kidd, that “the quantity of arsenic in each instance was *too great* to admit of any doubt as to the source from whence it came.”



## PART II.

### REVIEWS AND BIBLIOGRAPHICAL NOTICES.

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*Operative Surgery.* BY FREDERIC C. SKEY, F. R. S. London: Churchill. 1850. 8vo. pp. 709.

IF we estimate the different departments of our professional art by the amount of benefit which each is capable of affording to suffering humanity, we must unhesitatingly award to the operative branch of surgery the palm of superiority. The physician may achieve much in acute disease; by wielding with skill the various heroic remedies at his command, he is often enabled to anticipate the effects of inflammation, and thus rescue a vital organ from destruction. The surgeon also may check the progress of gangrene, promote healing in the soft parts, accomplish the union of bone, restore to joints their former motions, &c., &c.; but in these instances we must recollect that nature chiefly plays the game, and that in some cases cures would take place without the aid of art: in fact, so true is the latter observation as regards pure medical disease, that he is often the wisest practitioner whose treatment is expectant, or whose object it is to watch and assist, not to interfere with the “vis medicatrix naturæ.” Widely different is operative surgery, being, so to say, a purely mechanical art. Its principles are definite, its results conspicuous and conclusive, and its benefits palpably manifest. In illustration of these remarks we need only refer to the application of the ligature to a wounded artery,—by which hemorrhage is suddenly arrested, and life saved, to the operation for strangulated hernia, the extraction of a stone from the bladder, to amputation in irremediable compound fractures and dislocations, not to speak of the advantages derivable from the extirpation of adventitious growths and the redress of disgusting deformities: all these are so manifestly capable of bestowing substantial good upon mankind, that to

enter into any argument to establish our position would be to suppose that its truth could for a moment be questioned.

While, however, the knife is a powerful weapon for good, we should never forget that it may be made the instrument for greater evil; and we should recollect that it is in reality our ignorance and the contracted sphere of our therapeutic resources which oblige us so frequently to have recourse to its use. Formerly, in the practice of surgery, the knife was resorted to on almost every occasion, but as the light of science began to beam more vividly, it awakened in the mind of surgeons a love of research, so that the steel became less and less regarded; and now the great object with all is to carry forward the meritorious work of superseding, as far as possible, the employment of the knife, and in no instance has this been so successfully accomplished as in the recent mode of treating aneurism by compression.

And now, as we have alluded to this subject, we cannot refrain from passing our severest censure on Mr. Skey, for the superficial and imperfect manner in which he disposes of this operative proceeding, and for the ignorance he exhibits in the few observations he makes upon it. Had the Dublin surgeons been remiss in publishing the result of cases treated by this mode,—had not the pages of our Journals, both weekly and quarterly, teemed with reports upon this most important addition to the practice of surgery,—and had not the principles upon which the cure is thereby effected been clearly demonstrated, and a description of the principal mechanical appliances employed for compressing the artery been given in publications accessible to every one,—some excuse might be allowed for the author's omissions and ignorance; but as no such palliating circumstances can be pleaded in excuse by Mr. Skey, we cannot withhold the expression of our disapprobation. If his book be designed for the student, then, without a proper description of what, without any assumption, we may assert to be the greatest improvement in modern surgery, its instructiveness is but partial; and if it be intended for the use of the practitioner, then, as a book of reference, it is incomplete. We entertain the highest respect for Mr. Skey's surgical acquirements, which makes us feel the more surprised that he should display such want of information upon a subject in surgery, the principles of which are now clearly established, and the advantages of which are so important. We fear his mind has been somewhat tainted with the contagion which has localized itself in the northern metropolis of Great Britain; and that the *anti-pressure* cry, so loudly vociferated there by one of the ablest surgeons of the day, has found



an echo in him. It is true that Mr. Skey does not, with Mr. Syme, condemn the new plan as dangerous and improper, nor does he, with egotistical complacency, assert that none would adopt it but those whose want of manual dexterity deters them from employing the knife; yet in the few observations the author makes, he evidences a decided leaning towards the operation by ligature, and speaks of dangers connected with the treatment by pressure which experience does not warrant us in expecting.

It is well for the march of improvement that there are not many Symes in the world. A man of high celebrity as a practitioner, of extensive professional information, and of general talent, is, for two reasons, the most dangerous individual to espouse any particular opinion or doctrine: first, because if, from feelings of personal vanity or other motives, he becomes blinded, his very ability enables him to adhere to his own sentiments with persevering tenacity; and secondly, because he is likely to influence a large majority of those persons who have been in the habit of looking up to him for instruction and advice. How men possessing enlightened minds can be so mentally perverse in some instances as to close their reasoning faculties against demonstrative proof is to us incredible. This is not the time or place to enter into any advocacy of the claims which the treatment of aneurism by compression possesses for the adoption of surgeons, nor to advance arguments to prove its superiority over the ligature as a method of cure for more general adoption: the subject has been frequently ably discussed, and the merits and advantages of the plan clearly pointed out. However, for the benefit of those ignorant of the subject, we will present a few observations in the form of propositions.

First. In most cases a cure will be accomplished by compression before the arrival of the period at which a ligature would be separated from the femoral artery; and in some instances, peculiarly favourable, the first step to cure has taken place in a few hours; these are the cases in which the sac of the aneurism is well circumscribed, the heart sound, and the circulation tranquil.

Second. In compression there is no risk from any of those evil consequences which may result from the slightest cut, such as erysipelas, diffuse inflammation, tetanus, &c.; not to mention the dangers of the operation with the ligature, when performed unskilfully, and the risk of secondary hemorrhage and gangrene.

Third. Pressure can be tried where the application of the ligature would be quite inadmissible.

Fourth. By comparing the statistical accounts of both methods, the recoveries under the operation by compression have been found so vastly more numerous than those where the ligature has been employed, that we are only justified in retaining the latter plan as a *dernier ressort* in the few cases that compression may fail in effecting the desired end.

We might add a number of other facts and arguments in favour of compression, but if the foregoing be insufficient to establish for it a preference over the old plan of treatment, and to convince the sceptical, no multiplication of them could accomplish that desirable purpose.

As a work upon operative surgery, the volume of Mr. Skey is, perhaps, on the whole, not a bad one; it is difficult to write ably upon the subject, for the field it embraces is wide and extensive, and we must therefore make allowances for many faults; still we think that a surgeon with such extensive opportunities as Mr. Skey has enjoyed for so many years, might have furnished the profession with a fuller and more complete book. Quite independently of the treatment of aneurism by compression, there are many subjects of great practical importance in Mr. Skey's book too superficially dealt with, subjects such as a surgeon with extensive hospital opportunities, and who is possessed of acute powers of observation, can alone treat in a useful and improving manner.

The first chapter is devoted to the elementary details which form the introduction to all books on operative surgery, and, as far as they go, are instructive to the student. At the end of this chapter the author makes some remarks upon tetanus, as the consequence of wounds; and we cannot but think that, in his efforts to give as concise a description of the disease as possible, he has rendered his observations worse than useless. Better would it have been, where space was not sufficient, if he had contented himself with merely mentioning the name of the disease, or giving a definition of it; for the extreme conciseness with which he condenses his account of the symptoms of so complex a disease as tetanus, renders his remarks, we might almost say, ridiculous. Speaking of this disease he makes the following statement:—"Occasionally we find strange and unaccountable remissions of the symptoms, and patients have been known to rise up from bed, believing the disease to have left them." Surely he cannot here refer to the acute form of the disease in which the symptoms advance rapidly, the intervals diminishing *pari passu*, and should there be any decided remission, it is invariably to be received as the prelude to death. It is Mr. Skey's opinion, that opium in large doses is the best



treatment; for our part, however, we never found any advantage to arise from that drug, and there is a theoretical objection to its use, which, though insufficient to overturn altogether its claims to be a fit agent for administration in the disease, tend to weaken them not a little. We have seen the prominent tetanic symptoms more effectually influenced by the tincture of the Indian hemp, and the contemporaneous use of the vapour bath, than by any other plan of treatment. Mr. Skey considers that, where death is certain in tetanus, homicide is justifiable, and the weapon of destruction he would employ is chloroform. He says, speaking of a case in which he used that potent remedy—"his death was now certain, and I resolved he should die under chloroform"!! In justice to the author we admit that this strange phrase permits the inference that the agent was administered with the view of only smoothing the ruggedness of the path to the grave, but if we couple it with a remark he passes upon the exhibition of opium—"better that the patient die under opium than under tetanus,"—it receives a signification not unlike the meaning we are inclined to draw from it. We have administered chloroform in tetanus with marked temporary relief, but not with any apparent permanent advantage; and we consider that, if the dysphagia be not too great, the good effects of the agent would be better procured by giving it internally than by the inhalation of the vapour. Mr. Skey signifies his intention to apply, in the next case he meets with, the actual cautery to the spine, while the patient is under the influence of chloroform. Now, independently of the fact that any application to the spine is of very dubious benefit, since there is no appreciable lesion of the spinal cord essential to tetanus, deep indeed must be the anæsthetic slumber that would not be dispelled by the first or second touch of a red hot iron, where there exists a most peculiarly excitable condition of the system. We have experimented in a case of tetanus, while the patient was under the influence of chloroform, and we found that the only means of insuring its effect, even for a few moments, was by keeping the patient perfectly still, and free from the slightest impression; for the instant he was touched on any part of the body, or even the bed stirred, the anæsthetic condition immediately ceased, and the paroxysms returned as before.

The next chapter treats of dislocations. Amongst his general observations Mr. Skey remarks:

"It is desirable that an attempt to reduce a dislocated bone be made as early as possible. The difficulty increases daily, by reason of the increasing inorganic contraction of the muscles engaged, and

after the expiration of some weeks, by the new fibrous adhesions, which the dislocated bone acquires. But this difficulty should not be overcharged. It does appear probable, that an attempt at reduction immediately consequent on a dislocation, takes the muscles by surprise, and the object is attained with a facility that does not reward, with equal success, the same means employed even a few hours afterwards. But supposing this rare opportunity lost, I am doubtful whether the difficulty increases in any positive degree, day by day, for some time. I do not deny that the passive contraction of the muscles demands an increasing force of extension, by the mechanical agents employed, but I consider the progress of this difficulty to be so slow, as not to present any serious obstacle to the elongation of the limb by pulleys, or by similar agents, even though many days, or even weeks, have expired, since the occurrence of the accident."

The foregoing remarks are to be received with some caution; the expression, "even though many days or even weeks," is rather startling, and is likely to mislead the junior reader into the belief that if the first period after the occurrence of the injury have passed by, no harm can arise by delaying attempts at reduction for a considerable time, an opinion which is certainly not warranted by the results of experience.

Of the different modes of reducing dislocation into the axilla, Mr. Skey considers that by means of the heel in the axilla to be the most efficient; and when it is necessary to employ pulleys, he uses a pad which lies in the axilla and answers the purpose of the heel; it consists of "a well-padded iron knob, from which there extend laterally two strong, straight branches of the same metal, each ending in a bulb or ring of about four inches in length."

In the description of dislocation of the hip the author remarks:

"I have seen repeated examples of the following varieties—upwards, on the dorsum ilii, varying in distance from the socket from one to three inches; backwards in the ischiatic notch, on a level with the socket, and an inch above its centre; on the dorsum acetabuli, both backwards, and upwards and backwards; inwards and slightly downwards over the obturator foramen; yet further inwards on the ramus of the os pubis; inwards, and slightly upwards on the body of the os pubis, below the spine and transverse part of the bone; and straight upwards, nearly in front of the articulation.

"Many of these are, doubtless, mere modifications of the division propounded by Sir Astley Cooper, and for all practical purposes that division may still prevail; yet it is obvious, by the most cursory glance at the bones, that the relation of the two extremities to each other, the degree of inversion, and the extent of retraction of the



limb, must vary according to the position of the bone, and qualify, in no slight degree, the generally adopted opinions of the profession of the nature of the injury. Sir A. Cooper lays it down as a rule, that in dislocation of the head of the femur on the dorsum ilii, the foot of the dislocated side is thrown on the opposite instep. Now if, on examining a case, a surgeon of limited experience finds this relation of the extremities absent, if he be told to expect inversion of the limb to a certain extent, and there is little or no inversion, he may, not unreasonably, conclude that he has mistaken its entire nature. The fault would then justly attach to the writer, and not to the surgeon."

Next in order follow some concise observations on fractures. We consider that, in works on operative surgery, it would be better to omit all notice of subjects like these, for justice cannot be done to them, and they only increase the size of the book unnecessarily: this portion of Mr. Skey's volume is both superficial and imperfect.

We have now arrived at the portion of the work in which aneurism is treated of. We have already, from a feeling of duty, found it necessary to express our disapprobation of the author's description of the treatment of aneurism by compression; and now, as we again cast our eyes over the few pages dedicated to its consideration, we discover the grossest ignorance about the common appliances used for the purpose of compressing the artery. He says "the instrument employed should be a tourniquet," and of this machine he gives a diagram in another part of the book. There is no mention made of the pelvic apparatus with the ball and socket adjustment, the pad of which bears perpendicularly upon the artery just as it crosses the bone, where pressure can be best effected and longest maintained; nor of the other description of clamps now used for the lower part of the artery. We have seen the apparatus termed "tourniquet" by the author occasionally employed, where it was necessary to alternate the pressure at various points; but it is of use only in compressing the vessel as it turns round the femur, and cannot be borne for any lengthened period, in consequence of the degree of pressure it is requisite to exercise at this part. If the "tourniquet" be the only apparatus with which our author is provided, he might be long enough before he could accomplish a cure in aneurism; probably it is ignorance of the proper appliances and their mode of application which has often caused the failures which are reported to have occurred in England. In fact the main instrument for effecting the cure is the pelvic ball and socket machine, which has been so much improved by the addition of the vulcanized India-

rubber springs, for which ingenious contrivance we are indebted to Mr. Carte of this city. Mr. Skey winds up his observations by the following very qualified remark:

“But notwithstanding the occasional objections attendant on the application of pressure, as the agent of cure in the treatment of aneurism, a sufficient amount of success has already attended the experiments that have been tried, to warrant the hope of a useful, if not a brilliant career for this remedy, when additional experience has divested it of its objections.

Now this may be required in England: there “additional experience” may be needed; but in this country, where, for the last five years and upwards, almost every case of popliteal aneurism has been treated by means of compression, we have acquired an amount of practical knowledge upon the subject which demands “additional experience” to improve it no more than does almost any other plan of treatment with which we are acquainted; and we give utterance but to a simple truism when we state that a “brilliant career” is not merely in perspective for this great improvement: such has already attended its adoption in Ireland.

There is, perhaps, no subject in operative surgery upon which surgeons are so much divided in opinion as upon the relative superiority of the two methods of amputation, the circular and the flap. The prejudice against the flap operation seems of late to have considerably abated; still many—perhaps most—of the experienced surgeons, at least, in this country, those by whose opinions we would most willingly be led, give a preference to the circular operation, and invariably adopt it. Mr. Skey also appears to prefer the circular method. “My own experience,” he says, in speaking of the flap operation, “would lead me to doubt the expediency of this form, if we take into consideration all the circumstances incidental to the case.” He further remarks that, notwithstanding the cushion-like texture of muscle, it is ill adapted as a covering for the extremity of a stump. Though perhaps rather partisans as regards the circular operation, we cannot exactly subscribe to the last observation. What better covering can be had for the extremity of a bone than a soft, thick pad, formed of muscle; and is it not our object, in the circular operation, to bury as much as possible of the bone in the muscle, so that its extremity should not be completely covered and surrounded with integuments only? It is true that in flap cases the bone, after some time, from the absorption of the muscular fibre, comes to lie close to the skin, and thus eventually the stumps formed by



both modes of amputation are circumstanced in the same manner ; but it will be generally found that after the flap operation, a much thicker bursa intervenes between the extremity of the bone and the integument than is the case after the circular ; besides in the former there is usually a thick circular pad of muscle formed around the bone, which tends to bear off pressure from it when the weight of the body is thrown upon the face of the stump. No doubt, if the flap operation be badly performed, a conical stump will, in process of time, be the result ; but, on the other hand, unless the circular be particularly well executed, the bone buried as much as possible in the bed of muscle which surrounds it, and care taken not to turn up too deep a flap of integument, the stump will to a certainty become conical, and the skin covering the bone will be apt to inflame and grow attenuated, in which case it becomes adherent to the bone ; there is consequently no bursa, so that when the patient comes to bear on the extremity of the stump, the cicatrix is likely to ulcerate. Notwithstanding the disadvantages of the circular operation, we consider it, as a general rule, to be preferable to the flap ; not, however, on the ground that muscular fibre is a bad covering for the extremity of the bone, but because of the advantages which the former possesses over the latter in other respects :

“ In the circular operation, the integuments and muscles are cut through vertically to the plane of the limb. Arteries, veins, and nerves share the common lot ; all are divided directly across. The wound in the muscles is exactly equal to their transverse breadth. The larger arteries are tied ; the lesser arteries retract within their sheaths and cease to bleed. The integuments are brought over the cut extremities of the muscles, and unite to them and to each other by adhesion.”

The description of the various special amputations is rendered very useful by the accuracy of the accompanying woodcuts.

Of all amputations in the body, or, as Mr. Skey calls them, excisions, there is not one so highly important as that of the lower jaw ; and in a work professing to teach operative surgery we might expect an accurate and clearly detailed account of the different steps which conduct it. Hear, however, the extent of our author's communication upon this subject :

“ The patient should be placed in a high-backed chair, with the head well supported by an assistant. Supposing it intended to remove the body of the bone to the angle, a firm incision should be made along the line of its basis to the above extent. This incision

will necessarily divide the facial artery, which will bleed freely, and should be immediately tied. The knife should then be passed upwards into the mouth, separating the cheek along the same line from the gum, the point being guided within, by the fingers of the left hand. When the outer surface of the bone is clear, the knife should be again introduced near the symphysis, *inside* the bone, aided by the fingers employed in depressing the tongue and sublingual gland, to protect them from the knife, and should divide the muscles attached to its inner surface, but chiefly the mylo-hyoid. The attachment of the geni-hyoid muscles to the symphysis may render their division unnecessary. The division of the symphysis will require the application of the saw, and may be completed by the forceps. The masseter muscle is to be raised from its insertion into the angle, and the bone cut asunder as before. The operation is a simple one, may be performed in a short space of time, and leaves little deformity, or other evidence of its extent.

If a student could learn anything from this description, or a person who never witnessed the operation draw the smallest idea of its principles from it, he must, indeed, be more gifted with imaginative powers than the generality of his compeers.

We shall now pass over a number of subjects which the author treats in rather a cursory manner, such as the extirpation of encysted tumours, rhinoplastic operations about the face, paracentesis thoracis, tracheotomy, &c., and we then come to, perhaps, the most important subject in operative surgery, hernia. Mr. Skey makes the following just remarks :

“ If we divide an operation for strangulated hernia into three distinct stages, and give to the first of these, the dissection requisite to expose the seat of stricture; to the second, the division of the stricture itself; and to the third, the replacement of the intestine, or other part protruded, it must be acknowledged that we owe to anatomy nearly all the information by which we are enabled to remove the greatest difficulty in our path, with safety to our patient.”

He also truly observes :

“ *A hernia is always the cause of its own strangulation*, unless the aperture by which it escapes from the abdomen consists of muscular fibres so arranged as to be able to contract around it. In the case of diaphragmatic hernia, these two causes operate conjointly, but in all ordinary forms of this disease the ring is passive and not active in its relation to the proximate cause, and neither in the inguinal, femoral, or umbilical forms of hernia do we find muscular action otherwise than very remotely concerned in the causes of strangulation. In the disease known under the name of hernia cerebri, the ring is bony, and here strangulation occurs on a like principle, viz., the same swelling of the protruded parts that can alone explain the nature of abdominal strangulation. Indeed we find no muscular



fibres competent to contract on the ring, in either of the three localities in which hernia ordinarily occurs. And the occurrence of ventral hernia, in which the contents escape through an aperture formed in the abdominal muscles themselves, is hardly an exception to this law, because there is usually a deficiency of muscular fibres at the part to which the existence of hernia may be referred. If we could imagine a portion of intestine to escape through an opening, involving each of the three layers of these muscles, and exercising an active contraction on the protrusion, we should have a condition of parts essentially different from that which commonly attends the disease, when occurring in the ordinary situations. In truth, this antiquated doctrine, which has too long for the welfare of humanity, referred the cause of strangulated hernia to spasm of the muscles, is almost exploded, and with it the numerous class of supposed remedies attendant in its train."

He thus condemns strongly the principle of procrastinating the operation in strangulated hernia, as was formerly done, while useless remedies were being employed. In describing the steps of the operation he says:

"Care should always be taken that the contents of the intestine pass with the intestine itself, otherwise we are subject to an accumulation of the intestinal contents towards the end, and the return of the last few inches is rendered extremely difficult. When, in operating for hernia, the large intestine is involved, it is better to puncture the intestine by means of a fine needle, and let out the contents, than to make rough or protracted efforts to replace it. I have frequently done this with advantage."

After a few observations upon some minor operations, those for phymosis, hydrocele, hematocele, castration, and catheterization, the author leads us to the important subjects of lithotomy and lithotrity. These two methods of ridding the bladder of a calculus have each its advantages; still we find in this, as in many other instances, surgeons giving their adhesion exclusively to one mode of operation, and decrying the other. Lithotomy answers in cases in which lithotrity is altogether inadmissible, as in the case of children; again, lithotrity is, as a general rule, more suitable for employment with adults, and may be tried cautiously where the operation of lithotomy would be altogether contra-indicated. When the patient is an adult, when the bladder and kidneys are sound, and the calculus of moderate size, and not extremely hard in its composition, no one at the present day should think of having recourse to any operation but that of lithotrity. The objection that small fragments generally remain behind, and are apt to become the nuclei of other calculi, is futile; there is no reason why the bladder

could not expel every particle of a stone if it be broken up into sufficiently small pieces; and the fact that in France, where lithotrity is very generally employed, there appear to be complete and permanent recoveries after it, is in itself enough to establish its practical value. The surgeon cannot confine himself to one or other of these operations; and on this we beg the attention of our readers to the following observations:

“ In estimating the value of one or other mode of ridding the patient of the stone, we must calculate the results negatively as well as positively. We cannot acquire a sufficient insight into the merits of lithotomy without we also apply our minds to the results of the rival method of cure; viz., that of breaking up the stone within the bladder by means of the lithotrite. One fact is obvious, that the operation of lithotomy must be retained by all practical surgeons, as indispensable to treatment in many cases in which the resort to the screw of the lithotrite is as impossible as though it had never been invented; while, on the other hand, the known facility by which, under favourable circumstances for the operation, a stone in the bladder may be broken to pieces, and entirely got away without pain or injury, or considerable suffering of any kind to the individual, gives such palpable superiority, on the score of security, to this mode of treatment over the former, that it would appear an unpardonable neglect of the interests of those consigned to our charge, to resort to the old operation. It is obvious, therefore, that of the two modes of proceeding neither can be dispensed with, and the first duty of the surgeon, in any given case, is to determine which method is the more applicable, and more likely to meet all its necessities. If we were to select a case for the exhibition of the operation of lithotrity, —and I take lithotrity as the rule, and the cutting operation as the exception, considering the simpler and the safer course to be that demanding the first consideration, and before the tribunal of which the case is to be first brought for trial,—if we had the power of selecting a case especially suitable in all its bearings, we should require the following conditions:—First, well-developed manhood. Second, a healthy and readily dilatable urethra. Third, a bladder free from irritation, and capable of retaining at least six ounces of urine, a condition which infers the absence of prostatic disease. Fourth, a tonic condition of the nervous system; and Fifth, the presence of a stone of such dimensions as to be readily embraced by the screw of the lithotrite.”

The author remarks that it is not always necessary to withhold the lithotrite where there is muco-purulent discharge with the urine, and in confirmation of his statement adduces a case which was under his own care. The fact that muco-purulent discharge does not contra-indicate lithotrity, our own experience corroborates. Indeed it appears to us the most rational



proceeding to rid the bladder at once of the foreign body which is exciting the mischief. Should an excess of inflammation arise from any cause, we ought of course to wait until it is reduced, before having recourse to the operation

The author conceives that it is better to avoid making the patient endeavour to expel the detritus immediately upon rising after the operation; the bladder, he says, "appears paralysed by the violence done to it." With the view of saving the bladder from the labour of expelling the detritus by its own efforts after the operation, Sir Philip Crampton has invented a very ingenious and scientific plan. He employs a large ovoid-shaped bottle of very strong glass, one extremity of which is furnished with a stop-cock and short brass tube, just sufficiently large to enter the upper extremity of the steel catheter, which is wider than those in ordinary use. This apparatus is partially exhausted by means of a common exhausting syringe, the tube is then inserted into the mouth of the catheter, the cock turned, and the atmospheric pressure forces into the bottle the contents of the bladder, which carry with them the fragments of the broken-up calculus. This method requires to be manipulated with caution and gentleness.

In the operation for lithotomy, Mr. Skey recommends the plan of striking the knife at once into the groove of the staff at the very commencement of the first incision; this is adopting, in fact, the mode followed by Frère Jacques.

Our author next describes the operations for club-foot, for imperforate anus, the removal of cicatrices, autoplasmic operations, the extractions of foreign bodies, ovariectomy, &c. He then passes to the operations about the eye-lids, dwells a little upon the subject of cataract and its operations, and finally winds up with a short account of the operations on the orbit and the lachrymal apparatus.

We have thus reviewed, as fully as we think the merits of his book deserved, Mr. Skey's *Operative Surgery*. We regret that our notice has been one rather of censure than of praise; and we confess that we have criticised the work more severely than we should have done were it the production of a practitioner of less eminence, or of one who had enjoyed a more limited sphere of practice than a surgeon of St. Bartholomew's Hospital, London.

*Recherches sur le Crétinisme en général, et Compte Rendu du Rapport de la Commission nommée par le Roi de Sardaigne pour étudier cette Infirmité.* Par M. BOUDIN, Médecin en chef de l'Hôpital Militaire du Roule. (*Archives Générales de Médecine*, September, 1850.)

*Researches on Cretinism in general, and the Report of the Commission appointed by the King of Sardinia to investigate this Infirmary.* By M. BOUDIN, Physician to the Military Hospital of Roule.

THE most ancient records of medicine abound in statements relative to the custom of governments consulting physicians relative to measures affecting the public health, not merely with a view to the cure, but also to the *prevention* of disease.

We are told that the civic authorities of Athens had recourse to Hippocrates for advice, as to sanitary regulations, during the prevalence of the great plague described by Thucydides. But it is much to be lamented that this usage, so fraught with advantage to the public weal, had fallen into disuse for ages, and is only in our own time being revived.

This, like many other of the so-called *modern* improvements, is merely a recurrence to a practice as old as the days of the father of physic. We cannot, nevertheless, but hail with pleasure the many instances now presented to us of a solicitous care, on the part of governments, as to questions in which the health of the masses is concerned.

After complimenting the Government of Great Britain on the appointment of commissions with the laudable object of ameliorating the public health, such, for example, as the commission to inquire into the state of large towns and populous districts, and that from which emanated the statistical reports of the army and navy of England, M. Boudin informs us that, ten years since, the Helvetic Society of Natural Sciences deputed a commission to collect materials for a statistical history of cretinism in Switzerland, but failure of funds and want of proper organization prevented the Society from carrying out their excellent object.

In 1845 the Piedmontese Government intrusted to a commission an inquiry into cretinism in the Sardinian states. This commission made an appeal to all the physicians and ecclesiastics of the kingdom for information, and directed one of its members, M. Trombotto, to proceed to the different localities in which cretinism prevailed, that he might investigate the matter more closely. The researches of this physician, with



509 returns from the clergy, and ninety-four memoirs forwarded by physicians, serve for the basis of the reports published by the Sardinian government.

According to M. Boudin's resumé of the Report, the commission<sup>a</sup> defines cretinism to be "a degeneracy of the human species, which manifests itself in certain parts of the globe, and is characterized by idiotism, more or less marked, associated with a wretched cast of body, which is produced by causes so extended that a great number of the inhabitants are more or less affected by it in the development of mind and body."

Cretinism, which is a variety of idiotism, had previously, by Bischoff, in general terms, but in a most comprehensive definition, been said to be "a degeneracy and retardation of all the functions of body and mind."

It is a matter of much surprise that in ancient writings we find no notice of cretinism; the first mention made of it is in the commencement of the sixteenth century. Of late years many monographs on the subject have appeared; but we must consider the report before us as the most important document hitherto published upon this wide-spread malady, so miserable as regards its victims.

As to the geographical distribution of cretinism, it has been observed in Europe in the Alps, the Pyrenees, the Jura, the Hartz, and the Carpathians; in America in the Cordilleras; in Asia in the Himalayas, the mountains of Thibet, of Tartary, and of China. M. Boudin informs us that he has never encountered it in Algeria, but he has been told that some cretins exist in the Atlas.

Cretinism prevails over an enormous extent of the surface of the globe, from the Pyrenees to the wall of China, and from the Alps to Madagascar.

In the Sardinian States, the principal seat of the malady is in the valleys which surround Mont Blanc. In a population of 4,125,740, half of which inhabits the hills and half the plains, there are 21,341 affected with goitre, and 7084 cretins.

Sometimes the new-born child, threatened with cretinism, presents already an enormous and deformed head, which it can with difficulty support. The forehead is almost completely hidden by thick hair, which meets the eye-brows; the nose is flattened, the mouth large, the tongue thick, and the neck short and often furnished with a goitre.

<sup>a</sup> The Commission was composed of MM. Gallo, professor of surgery, president; Despine, inspector of mines; Riberi, professor of surgery; Bonino, physician to the army; Sismonde, professor of mineralogy; Cantu, professor of chemistry; Bertini, Gèné, Bellingeri, professors of the faculty of Turin; and M. Trombotto.

Cretins who have attained their full growth are often not more than three feet high. The cretin is generally thin and lank, but sometimes œdematous, with skin of a deep yellow hue, and a countenance which indicates a negative state of the intellectual functions, undergoing little change from the influence of age.

M. Boudin thus sums up the signs of cretinism, but to persons who have never seen these wretched pariahs of nature, the graphic description of Berchtold-Baupré will supply a more life-like picture:

“Who is this melancholy creature that bears the human form in its lowest and most repulsive expression? I see a head of unusual form and size, a squat and bloated figure, with a stupid look, with bleary, hollow, and heavy eyes, with thick, projecting eye-lids, and a flat nose. His face is of a leaden hue; his skin is dirty and flabby, covered with tetter; and his thick tongue hangs down over his moist, livid lips. His mouth, always open and full of saliva, shows teeth which are rapidly decaying. His chest is narrow, his back curved, his breath asthmatic.

“I see, indeed, arms and legs, but the limbs are short, misshapen, lean, stiff, without power and without utility. The knees are thick and inclined inwards, the feet flat. The large head droops listlessly on the breast; the belly resembles a bag, and its integuments are so loose that they cannot retain the intestines in its cavity. This loathsome idiotic being *hears not, speaks not*, and only now and then utters a wild, inarticulate sound. Notwithstanding his greediness he is scarcely able to support life.

“One passion alone seems sometimes to rouse him from his usual insensibility; this is the sexual instinct in its rudest brutality. At first sight we should be inclined to take this wretched being for a gigantic polypus, something in imitation of a man, for it scarcely moves; it creeps with the painful heaviness of the sloth, and yet it is the monarch of the earth, but dethroned and degraded.”

Cretins are subject to few ailments; but in the valley of the Po ruptures are frequent, and pellagra is not an unusual complication of cretinism. The pathology of cretinism is very shortly disposed of in the report of the Sardinian Commissioners. Only five out of the ninety-four physicians who supplied materials replied to this portion of the proposed queries, and they have been silent as to the diseases which proved fatal in the cases which they examined.

The pathological states are briefly reported to be: thick-



ening of the bones of the skull, the volume of the brain diminished, and its substance either indurated or softened.

There is no reference to the great development of the sympathetic nerve, so remarkable when contrasted with the defective development of the cerebral organization.

As to the influence of sex in the production of cretinism and goitre, we find that males supply the greatest number affected with the former, and females with the latter malady.

	Males.	Females.
Goitre, . . . . .	4323	5236
Cretins without goitre, . . . . .	1120	891
Cretins with goitre, . . . . .	1943	1959

Cretinism manifests itself, in most cases, from the period of birth to two years of age, and from five to twelve, the true period of strumous activity. We are surprised to perceive by the statistical documents that the hereditary nature of the disease is not very clearly established; since amongst 8000 fathers and mothers of cretins not more than 300 were afflicted with cretinism.

Parents who are cretins beget healthy children, and *vice versa*. Cretinism is often congenital, and infant cretins are met with who are incapable of taking the mother's breast.

The influence of a particular locality in the production of cretinism and goitre is well shown by the following deposition, which was made by a man named Welleger, in the course of an inquiry instituted by the Austrian government in the year 1844:

“My father observed that the throats of strange servants coming to inhabit his farm soon became large; they breathed with difficulty, their knees swelled, their feet became stiff and weak, and they were also attacked with shooting pains. After some years the intellect, which gradually grew weaker, at length approached closely to cretinism. The persons born on the farm were afflicted with this infirmity in the highest degree: it was formerly occupied by a family composed of four children, cretins, and an uncle, a demi-cretin. The father of the children was also a demi-cretin, which, however, did not prevent the two brothers from arriving at the age of 100 and 105. The same degeneracy was observed among the cattle, particularly the horned cattle. It was necessary to procure beasts from a distance, owing to the young cattle being affected with intestinal diseases and malformations. In the seigneurie of Abbeck the same observations were made. The present proprietor, after purchasing the property, took up his abode there, with his wife, both being in good health: she died a

demi-cretin, and afflicted with goitre. The proprietor and his second wife have also passed into demi-cretinism. The five children of the first marriage are idiots, their necks thick and their bodies stiff. The children of the second marriage, one aged three, and the other one year, are still in good health, but the same fate awaits them as their elder brothers, for the latter, also, were healthy in their early infancy. It is remarked that the stiffness of the feet, general torpor of the body, and dulness of the intellectual faculties, are associated with deafness and loss of speech, and they increase with age. It is also observed, that children born healthy do not show this malady until the latter years of childhood, but as they grow they gradually become cretins. When children who are affected change the locality, and drink water of a good quality, an improvement in their condition takes place."

The valleys most desolated by cretinism are deep, narrow, winding, and closed at the extremities, such as the valley of Maurienne. Their direction seems to have no influence. It has been observed that the villages most infected lie in the secondary valleys, so disposed that the winds prevail constantly in the same direction. Valleys which are open and spacious rarely contain cretins. The Commissioners do not point out, as Schönlein has done, that the shady sides of the valleys are peculiarly the cretin districts. They remarked stagnant water near all the villages where cretinism prevailed, and they observed a great diminution in the disease where draining had been practised. It had been previously stated by Rösch that the damp localities were the chief habitats of cretinism. The drinkable water in these localities abounds in calcareous salts, and is remarkable for an absence of iodine and bromine. This fact, however, loses much of its value when it is remembered that at Ivrée, where the water is extremely bad, there is neither cretinism nor goitre; whilst, on the other hand, these two affections are prevalent at Saint Vincent and the valley of Aoste, where the water is admirable.

The commissioners deduce the following general conclusions from their examination:

1. Endemic cretinism is limited, in continental states, to the valleys and plains which belong to the great alpine elevations.
2. There is an extreme similitude between the different infected valleys.
3. The valleys in which the greatest number of cretins are to be found, are those which are deepest, most close, most moist, and deprived to the greatest degree of light and air.
4. Cretins are most frequently met with in the least fre-



quented situations, in habitations ill-built, out of the way of public resort, and in the neighbourhood of marshes.

5. In the large towns and villages, where there is a great influx of strangers, it is only in the least frequented parts, where the progress of civilization and commerce has not extended, that cretins are to be found.

These conclusions, however, are not without exceptions. The Sardinian Commission determined upon adopting the following measures:

1. To drain the marshes, and to make canals for the rivers which overflow their banks.
2. To cultivate the drained lands.
3. To take down the plantations of lofty forest trees, in the neighbourhood of houses, to a distance of sixty yards, so as to admit freely the sun and air.
4. In districts where chemical analysis or experience has proved that the water which is used for drinking is unwholesome, to obtain water from a good source, or, if that be not practicable, to erect cisterns for rain water.
5. To demolish houses which, either from their situation or from their construction, are insalubrious and incapable of being ameliorated.
6. To prevent the erection of houses in localities acknowledged to be unwholesome.
7. To oblige landlords to construct houses according to sanitary rules, and to select good situations; the houses to be two stories high, and the ground floor to be raised above the level of the surrounding soil by means of a pavement or a bed of sand.
8. In the building of new villages, to avoid the valleys; to select elevated sites, exposed to the sun and wind; to make the roads broad, and to pave them with limestone.
9. To promote cleanliness everywhere.
10. To establish a sanitary council, composed chiefly of physicians, with plenary powers to execute every thing which may be required for the maintenance of public health.
11. To make laws to prevent the excessive rising of price of the necessaries of life, and to prevent the immoderate use of spirituous liquors.
12. To sell salt at the lowest possible price, so that the consumption should be great.
13. To encourage the use of animal food.
14. To promote trade by all means, so that employment may be general during the winter.
15. To open the country by new roads, with the view of facilitating communication and attracting travellers. Experience has shown that, even in a sanitary point of view, the opening of the pass of the little St. Bernard has been beneficial.
16. To establish public gymnastic games.
17. To prevent, by every possible means, individuals who have a tendency to cretinism, or who belong to families in which cretinism appears to be hereditary, or such as are rachitic

or scrofulous in a high degree, from contracting marriages; and to favour the "crossing" of races. 18. To have regular attendance on women in labour. 19. To cause women, who are members of families in which cretinism is frequent, to reside in healthful localities during their pregnancy, and while they are nursing their infants. 20. To institute prizes for the most careful mothers. 21. To establish asylums and schools. 22. To disseminate, as much as possible, sanitary regulations. 23. To collect the cretins in an establishment similar to that of Abdenberg.

We have now, finally, to refer to the most interesting question connected with cretinism, namely, its curability.

Recent investigations and the indefatigable labours of Dr. Guggenbühl, lead us to form a more favourable opinion on this subject than we could, *a priori*, have anticipated.

Congenital malformation of the brain appears to be the only condition which absolutely precludes the possibility of cure. All treatment is unavailing unless the patient is removed from those atmospherico-telluric states which are confessedly known to favour the production of the malady. Everything depends upon the early application of remedial measures. If it be conceded that cretinism is, what the German writers on the disease consider it to be, "an advanced stage of rachitis and scrofula," we are encouraged to have recourse to the means which are found so potent in the cognate affections.

We would mention cod-liver oil as worthy of the most extensive trial, and medically directed education is essential above all things. That cretinism is not only not absolutely incurable, but that individuals who have been cretins are capable of considerable mental culture, is abundantly manifested in the case of Dr. Odet, who was himself in the first stage of cretinism, and by judicious management recovered so completely that he wrote an essay on the disease.

Of the manner in which the Sardinian Commissioners have executed the task confided to them, we are enabled to speak in terms of high praise; but we regret that some of the measures they propose are visionary and impracticable.

Take, for example, the seventeenth clause. If we could by any means prevent members of families who have an hereditary taint from contracting marriages, it would most assuredly be fraught with the utmost advantage to the public health, but can we deal with human beings as we are in the habit of doing with lower animals, and "cross the breed" at pleasure, with a view to their improvement?



If the preventive measures which the Commissioners have recommended, and which are really practicable, namely, the draining of marshes, the cultivation of the drained lands, the building of habitations in healthful localities, and the construction of great highways, are carried into effect by the government, we are satisfied that the result will be a vast diminution of one of the most deplorable maladies with which humanity is afflicted.

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*Lettres sur la Syphilis, à M. le Docteur Amédée Latour, Rédacteur en chef de l'Union Médicale.* Par M. RICORD. Paris, 1850.

*Letters on Syphilis.* By M. RICORD.

M. RICORD, whose name is so well known as the most successful and able inquirer amongst the French surgeons of modern times into the nature and treatment of syphilitic diseases, has undertaken to publish a full exposition of his views in the above-mentioned medical journal, in the form of a series of letters to the editor. We gladly seize the opportunity, which an analysis of them will afford, of laying before our readers a full account of his doctrines. The letters are not yet completed, but we shall take up what may be termed the first division of them at present, namely, those which refer to blennorrhagia<sup>a</sup>, and complete the subject in a future Number of our Journal.

The author commences by complaining that his new doctrine of syphilis has met the same fate with all scientific discoveries, although during the last twenty years he has, both in his teaching and by his writings, endeavoured to render it intelligible to his contemporaries, for even yet it is not fully understood by all. One class of those who oppose his views continues still to put forth objections which he has over and over again refuted; whilst another class more extraordinarily seizes upon objections first advanced by himself, and by means of them ingeniously imagine that they can refute his doctrines. That such is the case he is neither astonished nor indignant, but, on the contrary, thanks his adversaries for having presented him with a new stimulus to exertion. The fact, he remarks, is obvious, that syphilography has not

<sup>a</sup> The term *blennorrhagia* is employed by M. Ricord to signify a "mucopurulent" discharge. Its use in this sense is not quite free from objection, but it is now generally employed by the French surgeons, and is probably less open to cavil than any other which could be proposed.

escaped the general revolution of scientific medicine, caused by physiological doctrines. The school of Broussais overthrowing all which preceded it, had even questioned the existence of a syphilitic virus. Hence arose an era of confusion, easily to be recognized in the writings of that time, in which all was doubt and uncertainty. At this period M. Ricord was appointed by "concours" to the hospital "du Midi," where, as his colleague, he found M. Cullerier, who, "upright and honest as a man, steady and rigidly exact as a practitioner, abandoned tradition (if the phrase may be allowed) beginning even to doubt what he himself observed, and no longer believing what he saw,—in short, doubt had with him taken the place of belief."

The cause of syphilis was doubted, its effects were doubted, its therapeutics were doubted. The physiological doctrine was adorned by great scientific display; M. Richond des Brus wrote a voluminous work, replete with facts; M. Desruelles brought statistics to its aid; and all pressed forward to combat the identity of the virus and its specific treatment. History even was placed under heavy contribution by M. Jourdan, one of the most learned writers of the age, who published a most valuable work, in which he places the opinions of former writers in contradiction to each other, and denies the identity of the syphilitic poison. Such was the state of science upon our author's appointment to the hospital "du Midi," when he resolved to take up the study of the cause of syphilis, proposing to himself the following questions:

Is there a special cause, a virus?—or do all venereal diseases spring from a common cause?

Two means of investigating this inquiry presented themselves to him. The first being the pure and simple study of the phenomena, as was practised by his predecessors, and which led to such different conclusions; as a specimen of which he cites the case of the three officers who had connexion with the same female while affected with a discharge, one of whom contracted a urethritis, the other a chancre, and in the third warts appeared. But Devergie, who first related the case, did not employ the speculum, and consequently no correct deduction could be drawn from it. The second method of inquiry was more pleasing to our author, as being more in accordance with the demands of modern science, namely, experiment. With this view he then imposed on himself the following conditions in his investigations: to derive the syphilitic virus from a known source, to place it upon a part easy of observation, and to note its effects. Experiment could alone fulfil these conditions; but experiment had been



tried before, and the results arrived at had been contradictory. What John Hunter had affirmed was denied by Caron, Brus, Jourdan, Devergie, and Desruelles.

The research was no doubt difficult, and required moral courage not to be led away by the illustrious names of Hunter or of Bell, or by the writings of Hernandez, of Percy, &c. The question should be studied anew, and the author should be solely responsible for the results.

How then was he to proceed?—To inoculate a healthy individual from a diseased one, or to experiment upon a diseased person himself? The former he considered unjustifiable; but did the second present fresh dangers to the patient, and if not, could it conduce to decisive results?

Previous observations and experience had led to the conclusions, that a former contagion does not hinder a second; that the primary symptoms are seldom solitary; that they multiply themselves with great facility; and that the gravity of the disease bears no relation to the number of primary sores.

Was it not then allowable, with the intention of throwing light upon a serious question in etiology and practice, to imitate by art what nature does habitually; more especially when close clinical observation had always proved that the constitutional disease bears no ratio to the number of primary sores, nor does a large extent of ulcerated surface leave the patient more liable to after consequences than a small one? Boerhaave, amongst others, had given it as his opinion, that venereal sores contracted in any other way than by the genital organs were always followed by severer constitutional symptoms. But clinical observation has demonstrated the fallacy of his observation.

M. Ricord concludes his first letter by stating that he has drawn the following deductions from the history of the disease, from universal clinical observation, and from the experiments of those who have preceded him:—in making his experiments on a diseased individual, by inoculation with matter obtained from himself, an additional disease would not be communicated to him, the gravity of the disease with which the patient was already afflicted would not be augmented, nor would he, in fine, be exposed thereby to greater danger of consecutive infection. For the better understanding of this part of the subject, the author directs attention to the endeavours made to inoculate animals with the virus taken from man, either with the intention of obviating the objection which might be supposed to arise from the use of matter taken from a person upon himself, or for the resolution of the curious problem

as to the possibility of the transmission of syphilis to animals. Hunter and Turnbull had tried in vain to inoculate animals with the syphilitic virus, and they obtained but negative results, whilst M. Auzias-Turenne believes that he has succeeded with certain classes of animals; which success, however, M. Ricord expresses his belief to be illusory. M. Cullerier, at the hospital Lourcine, and M. Vidal de Cassis, have studied this subject with much care, and have also arrived at only negative results.

Direct experiment and observations made upon an individual himself, were then the only means that could be depended on, and to these alone M. Ricord resolved to trust. It was, therefore, necessary that he should first seek out a source on which he could rely, in order that he could direct his investigations by it; and, consequently, he could no longer be content with the history of their cases given by patients themselves. It was also necessary to avoid the objections so justly urged against the experiments of Hunter and of Harrison, the facts reported by Bell, and the experiments of Hernandez. With this intention he studied the nature of the tissues from which he was to draw the reputed specific cause. It would not suffice, to use the words of Petronius, that a woman should be reputed diseased, nor would it answer to take at hazard a morbid secretion coming from the genital organs of a woman, to make, in short, according to the expression of Alexander Benedictus, a venereal tincture of a uniform colour, no matter what was its source. The scientific tendencies of the age demanded more.

M. Ricord did not adopt the simple conclusion, that the effects follow from the cause. "Who cannot be surprised," says he, "that in a question such as the venereal disease, where ignorance and fraud, as Hunter expresses himself, are the so frequent causes of error, and where this disease is almost always a proof of flagrant immorality, that surgeons have received the supposed morality of the patients as the testimony of their innocence? The testimony of their innocence!! In such cases there is nothing more deceptive, and especially as regards women."

Babington was the first to oppose the law laid down by Hunter,—that when neither pus nor puriform secretion were present, the disease could not be communicated; in fine, that infection is not possible before the appearance of a gonorrhœa, or after the cicatrization of a chancre. Babington urges that this conclusion is not without danger, and brings forward the following case, amongst others, as a proof:—"A traveller having exposed himself to the chances of a syphilitic



infection, arrived at home three days afterwards. About four days after his arrival, his wife was attacked with a gonorrhœa, and it was not until after ten days that he perceived for the first time that he was affected with a discharge, attended with the other symptoms of gonorrhœa." "If, under such circumstances," says M. Ricord, "Babington had not been satisfied with obtaining his information from the lady's lips, but had proceeded to an examination, he certainly would have found that the infecting cause lay not in the genital organs of this candid husband."

In cases of syphilis it is absurd to attempt to found a pathological truth upon the moral testimony of the patient. Where, then, is the cause of the disease to be looked for? At its source, in the genital organs, both internally and externally. Our author tells us that at the period of his election to the hospital "du Midi," the ordinary way of examining the female patients was to place them sitting upon the edge of a chair, and to separate the external parts of the organs of generation. If no lesion of their tissue was apparent, all morbid secretions coming from a more internal part were commonly reported as a blennorrhagic discharge: the entrance to the vagina being to his predecessors "the pillars of Hercules of chancre." Discontented with this mode of examination, it fortunately occurred for him, that M. Recamier shortly afterwards exhumed, from the armoury of surgery, the speculum; and all are now aware of the brilliant diagnoses made by its assistance, in the diseases of the uterus. This instrument had never been employed in the diagnosis of syphilitic diseases, and its use was even said to be contra-indicated in such cases, until our author, regardless of the received opinions, employed it in his practice, and acknowledges, that to its use he is mainly indebted for the success attendant upon his labours; for by means of it he was enabled to examine with the greatest accuracy the affected surfaces, and to witness the exact state of their secretions.

Commencing with blennorrhagia, M. Ricord endeavoured first to resolve, by experiment, the problem, "*Must blennorrhagia be ascribed in all cases to a specific cause?*" Hunter had proved that inoculation with the pus of a chancre produced a chancre. If, then, says our author, blennorrhagia must be ascribed to a specific cause, the muco-pus which it secretes, being inoculated, will indubitably produce phenomena similar to those which the inoculation of pus from a chancre produces. To be accurate in his results, to avoid all complications, and to remove all errors, it was necessary that the inoculation should be performed with muco-pus taken from a simple blennor-

rhagia, and from tissues completely free from all ulceration. It can then be well imagined how necessary was the use of the speculum, for without its employment these investigations would be impossible. Having made numerous experiments, and continued his researches for a length of time, M. Ricord was led to the result which he has embodied in the following proposition:

*When muco-pus is taken from a non-ulcerated surface, the results of inoculation with it are negative?*

The author affirms that all who have made this experiment have arrived at the same conclusion. To the truth of this we can bear testimony, having often repeated the experiment and never having been able to produce a specific ulceration; it is true that we have sometimes produced an irritation, but we believe the same would have resulted from a virgin lancet.

Some syphilographers have thought, with Hunter, that blennorrhagia was a form of syphilis peculiar to the mucous membrane. The preceding experiments disprove such to be the case, and as our author proceeds he shows that the purulent matter of a chancre coming in contact with a mucous membrane will produce on it a true chancre. The practical conclusion he draws from this portion of the inquiry is embodied in the following words:

*Blennorrhagia, inoculation with the muco-pus of which gives no result, does not owe its cause to syphilitic virus.*

Is it then produced by a *specific* virus? Nothing is more likely to give rise to blennorrhagia than the muco-pus furnished by certain inflamed mucous membranes. But on examining the question more closely we must acknowledge that a virus is wanting; nothing being more common than to find women who have communicated a blennorrhagia of a most intense form, with its attendant consequences, to have been themselves affected with only a uterine catarrh, scarcely purulent. In other cases the menstrual flux has been the sole cause. Again, we find, as exciting causes, errors in diet, fatigue, excessive venereal indulgence, or the use of certain beverages, as beer, of certain aliments, as asparagus, &c.; and even some will affirm that blennorrhagia is produced by connexion with a woman in perfect health. Against the many causes of error and fraud with which the path of the observer is strewn, our author is fully on his guard, and consequently maintains the following proposition:

*Women frequently communicate a blennorrhagia when they are themselves unaffected.*

For example: a married woman affected with a discharge



may cohabit with her husband, who has, if we may be allowed the expression, been acclimatized; but should another have intercourse with her, he may become affected with a blennorrhagia. Thus, when the causation of blennorrhagia is studied without prejudice or preconceived opinion, we are forced to allow that it is often produced under the influence, for the most part, of causes which are likely to give rise to inflammation of mucous membranes. Swediaur has proved this by his experiment of injecting a solution of ammonia into the urethra, and thereby producing a blennorrhagia. Did he mean by this experiment to assert that a blennorrhagia could be produced at will by an irritating injection? Without doubt not; no more than a coryza or ophthalmia could be caused by similar means. For blennorrhagia, as for all other inflammations, there is necessary a predisposition, that great unknown which rules over all pathology.

Some have imagined, with M. Baumes, that blennorrhagia arises from a sort of demi-virus or degenerescence of chancre. This is certainly the doctrine of the *juste milieu*; but to justify such, says M. Ricord, we have neither facts, observations, nor experience; and he believes that simple blennorrhagia is a complete stranger to syphilis, as far as regards its causation. Faithful to his premises, he affirms that when Harrison produced a blennorrhagia with pus taken from a chancre, it either acted as a simple irritant or produced a chancre; and that when Hunter imagined he produced a chancre with blennorrhagic matter, such could not have been the case if he had not employed for inoculation the matter of a true chancre. But if inoculation has proved that the cause or causes of blennorrhagia, whatever may be their seat in the two sexes, differ from the specific cause—from that virus which inevitably produces chancre, the consequences of blennorrhagia ought always to differ from those of chancre; and yet many cases of constitutional syphilis are attributed to blennorrhagia.

We shall next proceed to the inquiry into the incubation of blennorrhagia. The period of time fixed by Hunter and others was from a few hours to fifty days; a very *elastic* incubation, no doubt. In virulent diseases, where incubation is incontestable, the limits can be more clearly determined, as in syphilis, in scarlatina, in measles, &c. Even in plague, owing to the successful labours of M. Aubert Roche, the period has been determined to be eight days. That there is a greater or less amount of time between the cause and the appearance of the phenomena of blennorrhagia, the author does not deny; but

he denies that it can be truly called an incubation, no more than we should call the time which elapses between a wetting of the feet and the appearance of a coryza a true incubation. In the cases where blennorrhagia does not appear for a long time after the patient was presumed to have been exposed to its exciting cause, is it not more rational to admit some unknown cause than to refer it to incubation? Is it not the case with other species of inflammation? Can the cause of a pneumonia, of an arthritis, of a phlegmon, be always discovered? Beyond doubt, sexual intercourse is, in the male sex, the most frequently exciting cause; but he that would not admit other causes would fall into strange errors.

Where is blennorrhagia seated? This is a much debated question. In man it has been made to wander from behind forwards, and from before backwards, according to the fruitful imagination of syphilographers. Bell, in establishing his different degrees of blennorrhagia, has made it retrograde from before backwards. Hunter admits a virulent blennorrhagia identical with chancre, and places its seat in the fossa navicularis, but questions its virulency if it advance further backwards. Here then we find the spirit of systematizing ruling over the genius of Hunter, and his talent for observation continually struggling against his theory of blennorrhagia.

Graff has placed the seat of virulent blennorrhagia in the female sex, in the follicles in the neighbourhood of the urethra; Mouliné thought he had found it in the vulvular glands, so well described by Bertholin, and the pathology of which was so ably traced by Boërhaave, and lately more completely by Hugier.

Amidst these opinions, observation teaches us that the parts of the mucous membrane most exposed are those most easily affected. Our author, however, admits, that, as regards sexual intercourse, the urethral mucous membrane, in both sexes, is the part most frequently attacked. This fact has been laid hold of, as an argument, by the partisans of contagion; and M. Ricord says, that he would corroborate this view, if the term contagion is understood to express, what appears to him incontestable, that women suffering from blennorrhagia of the urethra may be considered as having, in most cases, contracted it from men affected with the same disease. Our own experience fully proves such to be the fact, and in doubtful cases we have been in the habit of introducing a finger into the vagina, and pressing against the urethra, when, if we find that pus is discharged from it, we pronounce the case to be a blennorrhagia occasioned by sexual intercourse.



Our author then demands, does this circumstance prove a virulent contagion? Certainly not: and he explains it by the sole and incontrovertible fact, that pus furnished by the urethra is the most irritant of all varieties of pus, when applied to certain mucous membranes.

Some syphilographers deny the existence of urethral blennorrhagia in woman, whilst others allow of no other form. Both opinions, when in the extreme, M. Ricord believes to be erroneous, as observation has induced him to admit, that every variety of blennorrhagia occurs upon all mucous membranes. If the lesion of tissue which blennorrhagia produces be examined, nothing will be found which simple inflammation may not produce; at one time being but a slight erythematous state without secretion, the dry blennorrhagia of some authors, a name ridiculous and absurd when introduced into syphilography. While, in the catarrhal form, we have mucous or mucopurulent discharges, which are only inflammatory complications, producing in the male chordee and abscess along the course of the urethra.

But, neither in the state of the tissues or the nature of their products, do we find anything which can be truly compared to those of syphilis: there may be some analogies, but there are notable differences. Thus amongst the first consequences of blennorrhagia, resembling the products of syphilis, is bubo; but this is infinitely more rare as a consequence of blennorrhagia than of chancre. In both the sexes bubo is only found where the blennorrhagia has been urethral, the other varieties never occasioning it. Peri-auricular buboes have been spoken of as accompanying blennorrhagic ophthalmia, but our author has never witnessed their occurrence.

Blennorrhagic buboes are highly inflammatory, little inclined to suppurate, and, even when they do, are not inoculable. Blennorrhagic ophthalmia appears only in company with the urethral form: and is it possible to confound it with, or draw the slightest comparison between it and syphilitic iritis! or can we establish the slightest similarity between blennorrhagic rheumatism and syphilitic exostosis! As regards eruptions, our author is much astonished how persons pretending to any experience could possibly have confounded eruptions attendant on the use of copaiba with those peculiar to syphilis. In fine, what surgeon of the present day could confound blennorrhagic epididymitis with syphilitic sarcocele? It was not possible to do so in the time of Bell, and still less so since the days of Sir A. Cooper. Our author begs that he may be permitted to pass over in silence the so-called tubercular diathesis, propounded in

Germany, as a consequence of the virulence of blennorrhagia, the subject of tuberculization being already sufficiently obscure without being shrouded in additional darkness. In conclusion, the argument may be reduced to this: that when blennorrhagia is stated to be the cause of constitutional syphilis, there must be some other source for it of a different nature from that which we have laid before our readers as simple blennorrhagia.

It has been proved by experiment and pathological anatomy that the urethra, and other deeply seated parts of the mucous membrane lining the genital organs, have been affected with chancreous ulceration. Was it not owing to their want of knowledge of the existence of *concealed* chancre that the doctrines of Balfour, of Todd, of Bell, and of Hernandez, have fallen to the ground? The existence, then, of concealed chancre being acknowledged, who doubts the existence of virulent blennorrhagia, which is solely the effects of chancre? There is nothing new in the idea, for Mayerne, in the seventeenth century, attributed urethral blennorrhagia to intra-urethral ulcers, and named them *πυρροια*; and is it not singular that Swediaur, who maintains the identity of blennorrhagia and chancre, should state that no one can deny the existence of virulent blennorrhagia, for he had witnessed ulceration within the urethra?

If in three felons who had been affected with blennorrhagia, and who were examined, after death, by Hunter, and if, in the instance in which a *post mortem* examination was made by Philippe Boyer, and even if in other cases no ulceration was found, what does it prove but that they were cases of simple blennorrhagia? M. Ricord has exhibited to the Academy specimens of ulcerated urethra, which he proved to have been caused, during life, by inoculation. Then is it not natural, the existence of urethral chancre being acknowledged, that it should be affirmed to be the cause of constitutional symptoms? But, it has been asked, are there not blennorrhagias which have been followed by constitutional symptoms, in which it is impossible to prove the existence of urethral chancre? Our author concedes this point, but says his concession is only apparent, as the facts had not been properly explained. It is also true that, in relative proportion to the number of blennorrhagias, *concealed* chancre constitutes the exception. Again," says M. Ricord, "it has been urged, and with an appearance of truth, that the great number of secondary symptoms said to follow upon a supposed *concealed* chancre are almost in proportion to those which succeed upon the exterior form of chancre. Must we conclude that *concealed* chancre occurs rarely, because we are not troubled with secondary symptoms by the vast mul-



titude who suffer from simple blennorrhagia; yet secondary symptoms are by no means rare amongst those who have been affected with this form of chancre. Besides, in all the cases where constitutional syphilis has been reported to have followed blennorrhagia, have all possible precautions been taken to prevent error? Undoubtedly not. Do we not every day find medical men contented with the diagnosis given to them by their patients? How science has fallen! This may be seen by the reliance placed on the history given by the patient in the memoirs of Martin and Cazenave, and in the thesis, otherwise so well executed, of M. Legendre. Why this cause of error? Blennorrhagia is generally a painful and tormenting disease, leaving behind it *sad reminiscences*, whilst the chancre that is followed by constitutional symptoms is in general indolent, suppurates but slowly, has little tendency to increase, and often cicatrizes without care; little heed is, therefore, taken of it, and it is regarded simply as an excoriation. Are all cases of constitutional syphilis, which are said to have owed their cause to blennorrhagia (even if the presence of urethral chancre be allowed), due to this cause? Most undoubtedly not. Can we forget how many other ways are open to the entrance of the virus, which patients may either forget or wish to conceal?"

The opinion of Girtanner is, "that syphilis owes its origin most commonly to chancres and buboes": of Swediaur,—“That the symptoms of syphilis seldom appear as the consequence of a blennorrhagia;” of Rayer,—“That secondary cutaneous eruptions are of rare occurrence after blennorrhagia, and that they are observed much more frequently as the sequelæ of superficial and deep venereal ulceration.” All, as may be perceived, accord with those of our author as to the relative rarity of concealed chancres in proportion to blennorrhagic symptoms.

A chancre, having been treated according to the most approved principles, is supposed to be cured, and a blennorrhagia, being consecutive, is supposed to be the cause of the subsequent constitutional infection. Ought it not rather to be attributed to the previous chancre, for on what form of treatment can we absolutely depend to neutralize the syphilitic diathesis? M. Ricord professes that he knows not, and our own experience fully agrees with him. There are some practitioners who, having administered a stated dose for a certain number of days, believe their patients to be radically cured. M. Vidal very recently published his opinion, that with 110 pills, prepared according to the formula of Dupuytren, neither more nor less, you *get rid* of syphilis!

Our author expresses himself as being most tolerant with regard to the opinions of others, but begs to be excused from following in their belief, as he is in the daily habit of seeing many who have not only swallowed the 110 pills with religious faith, but even 150, and yet have returned to him not cured. Who, we would inquire, that has had much experience in syphilis, will not acknowledge that, even after the best directed treatment, such has been the result?

M. Ricord affirms that the immense majority of cases of blennorrhagia are simple and benign, but that there also exists a virulent blennorrhagia, the blennorrhagia being virulent when there exists a *concealed* chancre.

In the study of the diagnosis of a virulent blennorrhagia, two conditions are requisite; first, that it should be absolute; second, that it should be rational.

The absolute diagnosis can only be obtained by artificial inoculation. Whenever the inoculation of muco-pus furnished by a mucous membrane results in the characteristic pustule, we can affirm, no matter how long its duration may have been, that it is a virulent blennorrhagia, and that a chancre exists. Much care, however, is required in performing this experiment of inoculation, as there may be a simple blennorrhagia coëtanæous with a chancre (a frequent complication), and which would give rise to error if the muco-pus of the former only were inoculated. The length of standing of the disease should also be considered, for, when we come to study chancre, we shall find that the period of its virulent secretion is limited; and again, the source from which a chancre is derived will often give but little assistance in diagnosis, as the woman causing the infection in a man may be only the depository for the time being, without afterwards being herself affected.

The violence of a blennorrhagia has been made synonymous with its virulence.

The contrary, however, is the truth, for, as a general rule, the least violent and least painful blennorrhagia is the most virulent, being generally accompanied by a chancre. The duration of the discharge also should not be lost sight of, as the most rebellious are generally those not attendant on urethral chancre. The nature of the discharge is a valuable sign, for that depending upon chancre is more purulent than mucous, and is also generally sanious, the least pressure upon the urethra rendering this symptom more evident. To give to this symptom its full value, care should be taken that the patient has not used a caustic injection, that a foreign body has not been introduced into the urethra, that a vessel in the urethra



has not been ruptured by chordee, and that the matter mixed with blood has not been expelled with the last drops of urine, as this would be symptomatic of inflammation of the neck of the bladder.

Wedkind believed that he had found in the enlargement of the follicles, in the neighbourhood of the urethra, near the frenum, a sign of virulence; but this is simply a phlegmonoid condition, and independent of all other complications, the most important sign being found in the swellings along the course of the urethra, and especially in the balanitic region, which is the most frequent seat of chancre.

In the treatment of blennorrhagia there are some who, believing it to be syphilitic, make no distinction, but administer mercury in all cases. Hunter held this opinion. Another class believe it to be a mild syphilis, and prescribe, so to say, a demi-treatment. "Fatal error," says the author; "syphilis either exists or does not exist. If it does exist no half measures will be sufficient. How, then, should simple blennorrhagia be treated? Many objections have been urged against the abortive treatment. Away with them.

"Can it be denied that the accidents consequent upon a blennorrhagia seldom, if ever, exist until the end of the first week or beginning of the second, and most generally during the third? The abortive treatment prevents epididymitis and all other evils attendant on the course of the disease. In fine, it is the prophylactic treatment of these diseases that should be adopted; and, in despite of that ancient prejudice originated by Bell, it must be insisted that injections are most important in the abortive treatment, and, so far from giving rise to strictures of the urethra, they are its best preventive."

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*Observations on certain of the Diseases of Young Children.* By CHARLES D. MEIGS, M. D., Professor of Midwifery, &c., in the Jefferson College. Philadelphia: Lea and Blanchard. 1850. 8vo., pp. 215.

WE have already had occasion to notice favourably several works from the pen of Dr. Meigs, all of which were characterized by acute observation, great fertility of resource, and sound practical instruction, but which also exhibited peculiarities that sometimes amuse, though rather shock a correct taste. The present work presents the same strange mixture with rather more startling innovations of language, and, we are bound in candour to say, with less of real value. It consists

of twelve chapters on, 1, diagnosis; 2, caput succedaneum; 3, inflamed eyes; 4, coryza; 5, bowel complaints; 6, jaundice; 7, dress; 8, cyanosis neonati; 9, respiratory diseases; 10, whooping cough; 11, laryngismus; 12, scarlatina.

The substance of the volume formed certain preliminary lectures delivered by the author to the class at Jefferson Medical College, in October, 1849, previously to the regular business of his professorship.

Dr. Meigs opens the question of diagnosis in infantile diseases with a direct denial of the popular prejudice, that these diseases are necessarily obscure, because the subjects of them are too young to explain their sensations. We quite agree with him, that "a knowledge of the diseases of childhood is not more difficult to obtain than that of the maladies of adult persons, because in either case, the medical man relies on his own observation, and not upon statements he receives;" the only difference being, that in the former case he must rely upon natural and not artificial language. The look, the expression of different organs, the attitude, the voice, the cry, &c., are all eloquent to an instructed mind. Into these points Dr. Meigs has entered pretty fully, and with discrimination; and also into the state of the infant before and after birth, with relation to its viability and to the asphyxia of new-born infants, inflammation of the umbilicus, &c. With regard to the latter, he observes:

"Perhaps the best mode of treatment in such cases is to cover the inflamed part with pledgets of lint dipped in cold infusion of flaxseed or slippery elm [the bark of the *Ulmus fulva*], after taking the precaution to circumscribe the augmenting area of inflammation by producing a new and different irritation, in drawing around it the point of the nitrate pencil."

Dr. Meigs' remarks upon the caput succedaneum are rather vague: he mentions having seen a tumour on each parietal bone, which clearly could not have been caused by the usual pressure; this we have seen too. In all cases he is content with applying a cataplasm, and waiting. This, however, will not always answer, and we have found it much better to make a small opening.

There is nothing new, and less than there might have been of what is old, in the section upon inflammation of the eyes; a dimly lighted chamber, great cleanliness, lint dipped in cold water, or mucilage of linseed, sassafras, or slippery elm, with a collyrium of acetate of zinc, wine of opium, and rose water, are the remedies suggested.



Certain states of the nares, which, though trifling in themselves, may really be attended with serious symptoms, are very carefully and satisfactorily noticed :

“ When one of the nostrils of a neonatus becomes stopped by dry phlegm, by crusts and scabs on the orifice, or by any foreign body detained within it, a certain degree of respiratory distress is the consequence, because the instinct of the child leads it to respire only by the nares and not by the mouth. Such respiratory distress is caused, partly by the lessened aeration of the blood, and partly by the fatigue or exhaustion consequent upon extraordinary exertion of the respiratory muscles. Under these circumstances, should the other nostril become obstructed, or wholly occluded, it will happen in many young children that they shall persist in their efforts to respire only by the obstructed nasal passages. In such a case, after making two, three, or four attempts to respire in vain, the infant starts forward, throws its hands wildly abroad, and, opening its mouth and throat, admits the air in a large stream into its lungs, and then immediately resumes its efforts to breathe through the obstructed nostrils again. Although temporary relief be thus afforded, it is possible that such imperfect and long-intermitted respiration will not suffice to aerate the blood, and that an impure current, partly oxygenated, partly carboniferous, in the brain, will at length lay the foundation of irregular innervations, putting the child's life into danger, and which, if continued to a certain extent, must bring it to its close.”

The remedy is first to clean out the nostrils and then to apply oil to their mucous membrane. Dr. Meigs, indeed, prefers the “ ointment of cucumbers ” to any other oily application. Although in ordinary cases averse to the use of caps for infants, Dr. Meigs has found a flannel cap very serviceable in these affections.

In the chapter on jaundice, the author very decidedly enters his protest against the foolish and mischievous fashions in dress prevalent, not only in America, but in these countries, and advises high dresses and long sleeves, especially with delicate children. He lays great stress upon the diet of a jaundiced infant, and recommends as remedies an occasional emetic with alterative doses of mercury, and a small opiate if necessary ; but he advances nothing new.

In addition, however, to objecting to the rejection of the cap for new-born infants, we cannot agree with our author, that, when in health and well clothed, children should be “ sent out to walk or ride in all weathers.” “ To dress a child like a fantastic doll and shut it up,” is of course a very foolish and injurious plan ; but to send it out in all weathers, hail, rain, and snow, is only a few degrees less foolish.

The chapter on cyanosis neonatorum is the best in the book, although incumbered by much laboured explanation: our readers may have seen it before in "Obstetrics, the Science and the Art." Cyanosis, "whether local or general," our author believes to be "a degree of asphyxia of the parts exhibiting the phenomena. Blue hands from cold weather, blue fingernails from ague, from cholera, from drunkenness, or etherization, is asphyxia of their parts severally. Asphyxia of the capillaries of the skin or of the extremities is not inconsistent with life; but asphyxia of the encephalic capillaries, when carried to a certain extent, is mortal. Mortal asphyxia is always so because the capillaries of the brain are the seats of the malady." The explanation of the occurrence of this asphyxia is given rather aphorismatically, as follows:

"The child is born with an open foramen ovale. But the foramen is provided with an operculum or valve. The valve, called the valve of Botalli, lies upon the left wall of the septum auricularum. When the valve is shut, the opening is closed. The lifting of the valve re-opens the aperture. If the valve be closed before the establishment of respiratory life, the child dies from the absence of oxygen in its brain, for the oxygen of the placenta cannot reach the brain by any other route." "As in uterine life aerated blood passes through the foramen, so, in the respiratory life, the carbonated blood, if any, passes through the opening to fill the left auricle. Whenever the left auricle is filled with venous blood, it is injected by the systemic ventricle into the brain and whole system. Such injections produce cyanosis."

Of this cyanosis children die, sometimes suddenly, sometimes after a longer interval, and in other cases they live and preserve the peculiar characteristics of the disease for years. The cure appeared to Dr. Meigs to consist in closing the communication between the right and left auricles; and, therefore, when a case occurred, he endeavoured to do this by placing the child, "which seemed to be nearly dead, upon a pillow, on its right side, the head and trunk being inclined upwards about twenty or thirty degrees." By this means the column of blood in the left auricle would naturally press upon and close the valve. "Upon placing it down in this manner, it became quiet, began to breathe more naturally, to acquire a better hue of the face, hands, and feet; until in a very short time, it was quite well again, and did well, having no further return of the attack of cyanosis neonati." Since then Dr. Meigs has not only succeeded in many cases himself, but his pupils and others who have followed his advice, have been equally



successful; and we agree with him that the credit of having first suggested the remedy is fairly his own.

There are two points in the treatment of croup worthy of attention; the first is the use of alum as an emetic, instead of tartarized antimony. Our author's testimony is decidedly in its favour, as being freer from risk :

“ To a child under a year or two years of age, it is quite safe to exhibit a tea-spoonful of powdered alum, mixed with a similar quantity of honey. Such a dose may be safely repeated in from ten to twenty minutes, though it is very rare to find an instance in which vomiting is not produced within five minutes of the time of its exhibition. Children vomited by this medicine appear to me to recover very soon from the nausea, and without any signs of that exhaustion or relaxation that follows a vomiting produced by antimonial wine or emetic tartar.”

We agree with the Professor that croup is one of the diseases in which there should be no hesitation about bleeding from a vein or by means of leeches, if we are called in at an early stage of the disease; but we think that he is disposed to overrate the benefits to be derived from tracheotomy at a later stage. It is true, he succeeded in one case, and so have others; but there have been so many failures, and it is so difficult to decide upon so serious an operation before the bronchi have participated in the disease, and so hopeless when they have, that the general opinion in these countries is unfavourable to its adoption.

We cannot conclude without suggesting most respectfully to Dr. Meigs the propriety of a little pruning of superfluous words, and of adopting a more homely and less pedantic phraseology. “ New born infants ” is not much longer than “ neonati ; ” “ treatment ” than “ therapy , ” &c. ; and we think the older and simpler phrase is in much better taste. It is a pity that the writer of the most distinguished works on Obstetrics, in the United States, since the time of Dewees, should thus disfigure his really valuable communications. We trust that he will take this observation in good part, for there is no one more entitled to our respect, and none of our transatlantic brethren for whom we feel more.

*On the Diseases of Women, including Diseases of Pregnancy and Childbed.* By FLEETWOOD CHURCHILL, M. D., &c. Third Edition. Dublin: Fannin and Co. 1850. Post 8vo., pp. 762.

IN the volume before us Dr. Churchill has united two of his former works, that on "The Principal Diseases of Females," and that on "The Diseases of Pregnancy and Childbed." The most striking advantage resulting from this arrangement is of an economic character; for now the same amount of matter can be obtained at a little more than half its former cost, when dispersed into two separate volumes. It would be an injustice to the author, however, to confine our praise to this feature of the present publication, important though it is. In reality the present volume is an amended and enlarged edition of the two works alluded to; being the third edition of that on "The Principal Diseases of Females," and the second of that on "The Diseases of Pregnancy and Child-birth;" books long held in much esteem at home, and so highly appreciated by transatlantic readers, that the fifth united edition (such as is here produced for the first time) is now selling in America.

As a comprehensive manual for students, or a work of reference for practitioners, we only speak with common justice when we say that it surpasses any other that has ever issued on the same subject from the British press. On looking through its pages we find that the author has made many alterations and improvements, has inserted several new sections and chapters, and has introduced all the important information which recent researches have added to this department of medical science. We have only further to remark, that we think Dr. Churchill has done wisely in continuing to give particular reference to the writings of the various authors whose opinions he quotes; this adds little to the size of the book, but very materially to its value and utility. The reviews of the previous editions, given in former Numbers of this Journal, must plead our excuse for this short notice of the labours of an author whose valuable writings have so materially advanced the literary character of the Irish School of medicine.



*Om Höftleden och Ledbrocken uti anatomiskt, pathologiskt och chirurgiskt hänseende, jemte en kritisk Öfversigt öfver några bland Inflammations-lärans viktigaste Punkter. Afhandling af CARL SANTESSON, M. D., Chirurgiæ Magister, Prosector vid Carolinska Med. Chirurgiska Institutet. (Med sex Plancher.) Stockholm: Norstedt & Söner. 1849. 8vo., pp. 272.*

*A Treatise on the Hip-joint and Articular Cartilages, with reference to their anatomical, pathological, and surgical Relations, together with a Critical Review of some of the most important Points of the Theory of Inflammation. By CHARLES SANTESSON, M. D., Master of Surgery, Demonstrator of Anatomy at the Royal Carolean Medico-Chirurgical Institution of Stockholm.*

THE work before us, published by Dr. Santesson, when a candidate for the chair of surgery at the Royal Carolean Medico-Chirurgical Institution of Stockholm, and submitted at the election as a test of his qualification, is divided into six chapters, the first descanting at considerable length on the anatomy of the hip-joint; the second treating of the disease called “*morbis coxæ senilis*,” for which he has proposed a new name, viz., “*osphytis chronica*,” the third on the subject of excision of the head of the femur; the fourth on the anatomy and physiology of the articular cartilages, particularly with reference to the morbid changes which may take place in them; the fifth giving a critical review of the principal questions regarding the theory of inflammation; and the sixth describing the diseases to which articular cartilages in general are liable, and dwelling on the importance of their study in relation to practical surgery.

Having devoted forty-eight pages to the description of the anatomy of the hip-joint, the author proceeds to inform us, in the commencement of his second chapter, that his object is not to present the reader with a systematic treatise on the diseases of this articulation, but that he intends his work merely as a contribution to one or two departments of its pathology which have been hitherto little known and little studied; he also adverts to the diseases of articular cartilages in general, and promises, if permitted, hereafter to pursue and extend these subjects, and to communicate the results he may obtain.

The abnormal changes which occur in the hip-joint he divides into three classes; the first containing congenital morbid deviations, whether they depend on arrested or faulty development, or arise from previous disease or from injury received during intra-uterine life. To the other two classes be-

long the changes which arise after birth: in one of them, (his second class), he places changes the results of accidental violence; and in the other, or third class, those which depend primarily on a morbid process in the articulation, excited into action by internal or external causes. The first two classes he lays aside altogether, "in consequence of the copiousness of the subject," and proposes to confine his inquiry exclusively to the last, in order that he may have space to delineate more fully, and with greater exactness, a form of disease of the hip to which it appears little attention has hitherto been paid in Sweden.

We think we cannot do better, in endeavouring to give some idea of his work, than quote largely from this part of his essay: and here, we may observe, he has adopted an opinion very generally prevalent, that the disease called *morbus coxæ senilis* is more common in Ireland than elsewhere; and he has with justice awarded to the Dublin School the merit of having done some service to mankind, by awakening attention to a chronic disease which heretofore has been, over and over again confounded with scrofulous disease of the hip, sciatica, &c., and the anatomical characters of which have been so little known that, when met with in the dead body, specimens of the disease have been mistaken for examples of intra-capsular fracture united by bone<sup>a</sup>. Hereafter, such errors as these in anatomy or in diagnosis shall, we believe, happily, not be committed.

This chronic disease of the hip is, the author says, doubtless, originally dependent, in most cases, on inflammation and its consequences, and he proposes to designate it, until a suitable classification be obtained, "coxitis," or more critically, "osphytis," externa and interna, according as it attacks the external or internal parts of the articulation. But in our judgment the evils arising from the multiplication of terms are so numerous and obvious, that an entirely new name should, in order to justify its introduction, be wholly unobjectionable; and one decided objection to the term proposed by Dr. Santesson consists, we conceive, in the circumstance, that the Greek word ἡ ὀσφύς, from which it is derived, and which he translates by "hip," "loin," is much more commonly applied to signify the loins than the hip. Such etymological uncertainty is evidently calculated to confuse the reader, and should therefore be avoided<sup>b</sup>.

<sup>a</sup> See Todd's *Cyclopædia*, vol. ii. p. 799, and *Dublin Journal of Medical Science*, First Series, vol. viii. p. 220.

<sup>b</sup> The only definition of the term ὀσφύς, given in Parkhurst's *Greek and*



The author has, no doubt with some reason, objected to the term *morbus coxæ senilis*; but, while we admit this, we think it would have been candid in him to have referred to the words of Mr. Adams, who, from his later experience of this disease, thought proper to change the name he first gave it, to that of “chronic rheumatic arthritis of the hip”<sup>a</sup>.

Were we to approve of the new name of *osphyitis*, given by Dr. Santesson to the disease, as it affects the hip-joint, we should appeal to him to supply us with a special denomination for this same chronic disease when it makes its appearance in the shoulder, elbow, hands, &c. This, we imagine, would impose no small labour on the author, as some patients are so constitutionally affected by it that scarcely one articulation of the whole skeleton seems to have been exempted.

The disease evidently consists in an inflammation of the different structures of a joint, including generally the synovial, the fibro-synovial, and the cartilaginous tissues: in a word, it is an arthritis, and of a chronic nature, although Dr. Santesson, in a note to page 59 of his work, objects to the name “chronic rheumatic arthritis,” and states that he considers the idea of rheumatism to be here quite misapplied; however, to us it plainly appears to present more of a rheumatic character than any other chronic arthritis we are acquainted with. Indeed, when the disease affects the wrists and hands, rendering the fingers nodose or knobby, it is popularly denominated rheumatic gout. The patient affected by this species of arthritis, whatever be the joint implicated, feels his pains influenced by atmospheric changes; therefore we do not see that the objection of the author to the term *chronic rheumatic arthritis* is well founded. We would ourselves prefer a more euphonious title for the disease, but we cannot discover a better

English Lexicon is “the loins of the human body, comprehending the five lower vertebræ of the back.” Liddell and Scott translate it, “the hip, opposed to *ὤμοι*, the shoulders;” but add, as a second definition, “*ὀσφύς διπλή*, the muscular parts of the small of the back divided by a furrow, the loins.” Donnegan and also Giles give only “the loins.” In Schrevelius’ Lexicon, by Steele, Edinburgh, 1823, the definitions given are, “*lumbus, ilia*.” And Turton, in his Medical Glossary, London, 1797, states the meaning of the word *osphys* (*οσφυς*), as simply “the loins.” Castellus too, in his standard “*Lexicon Medicum*,” translates the word “*lumbus*,” and terms “*lumbago*” “*ὀσφυος ἄλγημα*.”

<sup>a</sup> The words we allude to are as follows:—“The writer long ago, in his Clinical Lectures, gave the name of *morbus coxæ senilis* to the disease in question; but as he has since met with many instances of its occurring so early as the age of 30 or 40, he is now more disposed to substitute for this name that of *chronic rheumatic arthritis* of the hip-joint; and he considers it as the same disease precisely as he has elsewhere in the work” (Todd’s Cyclopædia) “described as affecting the other articulations.”

designation than "chronic rheumatic arthritis," whether we allude to it as affecting the hip-joint, or the shoulder, or any other articulation. This term in Dublin, we may say, is current with the profession; it is entered in the catalogues of our museums, and various communications regarding the disease have been made to the Pathological Society under this designation. Indeed, a small work has lately appeared in London, entitled "Notes on Chronic Rheumatic Arthritis," by Mr. Canton, and the essay contains many valuable cases of this disease, not merely affecting the hip, but also the articulations of the shoulder, and even of the vertebræ; so that on the whole we do not feel disposed to change the title we have in Dublin given to the disease for that of *osphytis*, proposed by Dr. Santesson, much less for that of *myositis coxæ*, suggested by Wernher.

Our author next passes to a history of the disease, giving as its synonymes the terms "*morbus coxæ senilis*," and "*malum coxæ senile*;" and, as his sketch gives some information which may be useful to those of our readers who may wish to investigate the subject further, we shall here give an abstract of it. Having alluded to Benjamin Bell's works, and to Dr. Smith's observations, published in the sixth volume of the First Series of this Journal, he remarks that the surgeons of Great Britain and Ireland, more particularly of the latter, where the disease appears to be more common than elsewhere, are most conversant with the subject. The museum of the Richmond Hospital, in Dublin, he continues, contains a great number of valuable specimens of the disease, not merely examples of it as it affects the hip-joint, but likewise as it manifests itself in all the other articulations. On the Continent, the best and most elegant [*vackraste*] preparations of the disease are to be found in Sandifort's Anatomical Museum, at Leyden. The Dupuytren Museum, at Paris, likewise contains an occasional valuable specimen of the pathological process in question.

The author next alludes to Mr. Adams' labours on the subject, and then remarks, that he is not aware that any French author has written on it. Wernher, of Giessen, was the first who made this form of disease known in Germany, and afterwards treated of it in detail. Subsequently, Schlegel and Schoemann, the latter in Schmidt's "*Encyclopedie der gesammten Medicin*," vol. iv., p. 493, *et seq.*, have written on this peculiar disease of the hip, but without making any addition to what was already known on the main points. Rokitansky has, in his "*Handbuch der Pathologischen Anatomie*," mentioned the



anatomical changes belonging to the disease, in treating of the abnormal conditions of the bones, which, according to him, distinguish the "genuine arthritis."

Under the head of "pathological anatomy of chronic osphytis, (1) changes in the soft parts of the hip-joint, (b) ligaments, fibro-cartilages, and synovial membrane," the author alludes, (p. 65) to the well-known absorption of the round ligament as the result of this disease, and the filling up of the depression in the bottom of the acetabulum, and also that on the head of the femur. He notices that the part of the synovial membrane which may be found remaining is thickened, villous, and highly vascular, sometimes forming around the neck of the thigh bone fringe-like prolongations of an intensely red colour, and velvety surface.

"Mr. Adams," he continues, "describes cases in which these productions were of a rounded and conical form, half an inch long, and two or three lines broad at their bases. They resembled much in form the long conical papillæ to be seen on the tongue and about the fauces of herbivorous quadrupeds; however, instead of being white and firm, they were soft and villous, and of an intensely red colour. In two cases, in which these fimbriæ existed, the line of the corona of the head of the femur was absorbed, and the different foveæ or depressions thus found were completely occupied by vascular fimbriæ. The villi and filaments of the synovial membrane in these examples passed immediately, and without any definite boundary, into the cartilage, which had been changed into a fibrous substance. These formations are evidently products of a chronic inflammation."

The author next mentions the changes which take place in the head and neck of the femur, the acetabulum, and pelvis; and having described in detail the causes and course of the disease, and reverted to its inflammatory nature, he quotes at length, and has thought it necessary to refute, Wernher's obviously untenable theory, that the commencement of the disease is always an inflammation of the muscles of the hip, a "myositis coxæ."

Dr. Santesson has nothing to add to what is already so well known as to the symptoms, prognosis, &c., of this disease; we shall therefore now proceed to advert to the account he has given of its treatment.

When the affection proceeds from a local cause, such as a fall, it requires perfect rest, combined with decidedly antiphlogistic measures, for the acute inflammation which follows on such an injury may easily pass into the chronic form under consideration. Repeated local bleedings around the joint, by means of

leeches or cupping, are peculiarly appropriate in such cases; the extent to which this plan is carried being modified, of course, according to the severity of the symptoms and the constitution and general state of health of the patient. The application to the part of a towel wrung out of cold water and covered with a dry sheet, and renewed every hour or half hour, has been found by the author to be especially useful, being more beneficial, more cleanly, and easier of application, than the various liniments recommended by most practitioners. In addition to these measures, the use of general tepid baths or vapour baths will be found very advantageous.

Where the disease has arisen out of the sequelæ of articular rheumatism, the local abstraction of blood and the employment of derivative measures become necessary. The internal treatment, too, must be adapted to circumstances. The author is of opinion that nauseating medicines in large doses, with, if required, the addition of rhubarb, are singularly efficacious. He likewise recommends a combination of calomel with the golden sulphuret of antimony, a form of medicine analogous to our Plummer's pill; as well as full doses of Dover's powder at night, and (in severe cases) even by day. The English, he states, employ colchicum and blue pill. The use of quina in large doses for the treatment of this disease has been recommended by the French pathologists, and the author adduces his own experience in proof of the efficacy of this mode of treatment. In the stiffness which accompanies the affection, the Finland baths, or Russian vapour baths, he considers to be very useful.

When the disease begins more gradually the treatment should be less active, not only because in such cases it seems to have little or no beneficial influence, but because it sometimes appears even to produce an injurious effect on the patient's general strength. Wernher, carrying out his view of the first origin of the disease being due to an inflammation in the muscles of the hip, recommends, in these cases also, local bleedings; the blood to be drawn from the parts where the muscles are found to be most tense, or give pain on motion or pressure. He lauds, moreover, a continued course of emollient narcotic cataplasms and local vapour baths, repeated several times a day. Mercurial and narcotic liniments he considers to be less efficacious, and he thinks it necessary to warn especially against the use of blisters, moxas, or the actual cautery, as they most frequently aggravate the evil by injuriously exciting to irritation the muscles which, according to his (Wernher's hypothesis) are principally affected. Dr. Santesson states that he has seen some



cases in which flying blisters, as well as caustic issues, were decidedly advantageous; although they did not effect a cure, they certainly palliated some of the worst symptoms. He is also in favour of the use of vinegar poultices, of Autenrieth's (tartar emetic) ointment, of liniment of caustic ammonia with tincture of cantharides, &c. Pearson's sulphuric acid liniment, prepared according to the following formula, he found particularly useful:—olive oil, an ounce and a-half; oil of turpentine, half an ounce; and concentrated sulphuric acid, from half a drachm to one drachm, or, for persons with more delicate skin, one to two drachms of dilute sulphuric acid: these must be mixed with care, and well shaken before use. A portion of the liniment is to be rubbed in, once, twice, or three times a day, according to circumstances; and the smeared part should afterwards be covered with lint. During the employment of all these means, it is especially necessary to keep the joint at rest, perfect quiet being one of the principal conditions necessary for amendment. Attention to this point alone does more than all the other means taken together, if motion be allowed. It is not, however, necessary that the patient should keep his bed; he may be dressed and lie on a bed or sofa.

Through the employment of these measures, modified according to the several indications which may arise in each case, a certain degree of mitigation of the symptoms will most generally be obtained, and the patient will be able to walk with the assistance of a crutch or stick; it is true his gait is crippled, the step of the affected limb is short, but motion is unaccompanied by pain. He feels the limb freer and easier [*mera medgörligt*]; its motions, particularly those of flexion and rotation, are allowed to a greater extent than before, and in general the grating friction sound is less remarkable. The shortening, however, remains undiminished. It must be confessed, also, that although these means may be thus far useful in some cases, there are many others in which no very decided advantage is derived from perseverance in them; and under such circumstances it is our duty to spare the patient the continued use of active measures, whose least evil may be their inutility. Pathological anatomy will certainly justify these views, and show how little can be expected from our efforts in this way. Our principal object should be to prevent a relapse, by directing the patient's attention to the necessity of sparing the motion of the affected limb as much as possible; and he must be careful never to lean upon it. In spite, however, of every care, the gradual shortening of the limb cannot be prevented so long as the morbid process in the hip continues, and it will

be advisable to acquaint the patient with the possibility of the occurrence of such a state. Should he, through any want of caution, over-exertion in walking, &c., have aggravated the disease, the author is aware of no simpler or more efficacious remedy than rest, and the application to the hip of the Gräfenberg water dressing before described.

In our experience, however, of the disease in this country, it is almost uniformly chronic, insidious in its attack, gets very slowly, but progressively, worse, and does not present those alternations of getting better and worse, noticed by the author.

At the close of the chapter on this peculiar affection Dr. Santesson adduces in full, as an illustration of the symptoms, the case of a patient who had been under Mr. Adams' care in the Richmond Hospital, and has accompanied it with a full-length figure, copied from Todd's Cyclopædia, whence also the case is taken. If the author had studied this case in all its details, and compared it with those, no doubt, to be met with in Sweden, we think he would not have spoken so freely of the improvement the patient experiences (even under the most judicious treatment) in the motions of rotation, flexion, and abduction; because, when this chronic disease is fully established, these movements of the hip-joint are extremely limited. Indeed, most of the movements in these cases, although *apparently* taking place in the hip-joint itself, are *really* movements of the articulations of the lumbar vertebræ, which the pelvis follows. A patient labouring under this disease can ride on horseback, showing that a certain degree of abduction of the thigh is possible; but in mounting the horse, to enable him to throw the affected leg over the back of the animal, we always observe him lean down so as to make the axis of his body nearly horizontal, in consequence of the stiffness of the hip-joint. In the case he has copied, it is distinctly mentioned, "that the patient cannot, under any circumstances, flex the thigh on the abdomen, so that when he assumes the sitting posture he is obliged to place himself forwards, on the very edge of the seat, the right thigh remaining in the same line as the axis of the trunk, the leg usually flexed, and placed under the chair or across behind the other, &c. &c. He has scarcely any motion in the hip-joint." The *apparent* shortening of the limb, when he rests on the sound one, arises from the lumbar vertebræ being much curved to the opposite side, and the pelvis being elevated in the affected side, while the real shortening, ascertained by accurate measurement, amounts only to half an inch. "A little abduction is admitted; rotation and



flexion occur just to a sufficient degree to show that no true bony ankylosis exists."

Amongst the therapeutic means to be had recourse to for the cure or alleviation of this disease, the author has omitted to mention cod-liver oil, lauded by Dr. Bennett in the treatment of chronic rheumatic affections, and strongly recommended by Sir Benjamin Brodie, in the latest edition of his work on "*Diseases of the Joints*," as highly deserving of trial. In our opinion, the propriety of his recommendation of absolute rest of the affected part, which we know to be so indispensable in the strumous affection of the hip-joint, is very questionable, unless it be confined to the very earliest period. The disease is generally advanced when the medical man is consulted, and under such circumstances, we think that absolute rest of the joint, without promising to be of any real utility, must prove highly injurious to the general health; at least, such are the conclusions that our experience of the disease would lead us to.

We have already stated that Dr. Santesson has promised to take up this subject again, in a new edition, and these observations may, we hope, induce him to study the symptoms of the disease as they present themselves in nature, and report the result to the profession. We trust he will accomplish his promise as faithfully as an eminent writer on the diseases of the joints, who, in 1812, made a similar promise, and afterwards, particularly in the edition of 1850, so admirably redeemed it<sup>a</sup>.

On the whole, we consider Dr. Santesson's work to be highly creditable to the surgical literature of Sweden, and we hope, on a future occasion, to bring before our readers the consideration of some important questions discussed in other parts of the volume. The work itself is neatly got up, being printed in good, clear, Roman type, and illustrated by six admirably executed plates.

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*On Fatty Diseases of the Heart.* By RICHARD QUAIN, M. D., Assistant-Physician to the Hospital for Consumption and Diseases of the Chest. London: C. and J. Adlard. 1850. Pp. 76 (Reprinted from the thirty-third volume of the *Medico-Chirurgical Transactions of London*).

THE literature of fatty accumulations and degenerations in animal tissues is of comparatively recent date. In the works of

<sup>a</sup> *Pathological and Surgical Observations on the Diseases of the Joints.* By Sir B. C. Brodie, Bart. London: 5th edition, 1850.

some of the ancient writers we find cases recorded in which remarkable hypertrophy of the adipose tissue existed, and there is little doubt that many of the injurious consequences produced by the predominance of fat in the system were known to them, more especially its influence in retarding and supplanting the growth of muscle, and in producing general hebetude of the mental and corporeal energies, and that diminished power of resistance which renders the body more prone than usual to various diseases, and even to sudden death. The want, however, of proper appliances, before the discovery of the microscope and the extension of chemical analysis, prevented the older authors from discovering that, besides the superinduction of fat upon other tissues to their detriment, an actual conversion of many of these tissues into adipose matter does occur during life.

In the works of Haller we perceive some of the earliest traces of the adipification of muscular structure noticed as occurring when the voluntary muscles were paralysed or long disused, especially in aged persons; but we are indebted to Vicq d'Azyr for the first case of this nature published in detail. This anatomist, while examining the body of an old man brought into his dissecting-room, discovered that remarkable sebaceous degeneration existed in the muscles of the lower extremity, so that scarcely a vestige of their original structure remained. In commenting upon the case he observes, that the fat was not deposited between the laminæ of the fibres, "*mais entre les élémens de la fibre elle-même.*" Most persons who have been long conversant with anatomical investigations have met with similar instances. In the ninth volume of the former Series of this Journal, Professor R. W. Smith has cited two cases which were seen by him; in one, "the muscles of the external iliac fossa were removed, and their place occupied by true adipose tissue." In the other, a case of varus, the muscles of the sole of the foot were converted into fat. An interesting example of the same kind is described by Mr. Hallett, in the *Edinburgh Medical and Surgical Journal* for April, 1849. Similar deteriorations occur in other animals; fatty degeneration was discovered in the muscles of a paralysed sheep by Dr. Vaughan, of London, in the year 1813; and though the discoverer's quaint description excited not a little ridicule among the reviewers of the day, the importance of the fact was fully recognized by Dr. Andrew Duncan, of Edinburgh, in his account of a case of fatty degeneration of the heart, published in the year 1816, the first example of the kind publicly noticed in this country. We regret, however, that the value of many of the early cases



of fatty degeneration on record is lessened from the want of microscopical examination.

The author of the highly interesting treatise now before us is disposed to regard the changes found to exist in adipification of the voluntary muscles as different from true fatty degeneration of the heart. From his microscopic observations it would appear, "that the tendency of voluntary muscles is to degenerate into a fibrous tissue mixed with fat, rather than into granular fatty matter." He admits, however, that his examinations have extended only to paralysed muscles, and that "in the flabby muscles of scurvy, or other diseases of mal-nutrition," analogous changes may be found.

An important question, which arises from the degeneration of muscular structure found in the heart, is, whether "the molecular fatty matter, which exists in the fibre, is the effect of a chemical and physical change, or the result of the processes which we call vital." There are many reasons for believing that it is a conversion of texture. Thus we know that when muscular flesh is exposed, after death, to peculiar agencies, it undergoes a chemical change into fat. It has certainly been supposed that adipocire may be produced from the persistence of the fatty ingredients after the removal of the muscular fibre by decomposition; but a sufficient quantity of fat does not exist, in such cases, to explain the change, without involving also the fibrin. Brande has noticed the artificial formation of adipocire from dilute nitric acid acting upon albumen; and Wurtz has obtained butyric acid from the decomposition of fibrin in the open air. Dr. Quain cites, in confirmation of these statements, a remarkable circumstance which occurred to himself. He placed in weak spirit and water the healthy heart of a child, who had died from the effects of a severe burn, and upon examining it, in a few weeks afterwards, it presented "the most marked and universal characters of true fatty degeneration." If this example can be depended upon, it would be decisive of the conversion of muscular tissue into fatty elements. Still it would be well to test, by further experiment, whether it be a circumstance of constant occurrence, and if not, whether any peculiarity in the mode of death could contribute to the change in the example adduced.

As it appears from the foregoing reasons that fibrin can be converted into fatty matters when free from any vital influence, the next point to be determined is, whether analogous changes may not take place in the body during life. Rokitansky, in his valuable work, affords us very strong grounds for this opinion. He shows that fat is found in various situa-

tions where it could not be regarded as a deposition from the blood, as no vascular communication exists. Thus it has been found in tubercle, in masses of effused fibrin, in the walls of arteries, in cancerous masses, &c.; and in these instances it is identical with the granular fatty matter found in degenerated muscular fibre. Rokitansky proceeds to argue that an actual conversion of tissues into fat is almost certain, for these reasons:—First, it supplants structures into whose composition it could not have entered in the injuriously large quantities in which it is found to occur; secondly, it exists in places where it is impossible that it could have been deposited by the vascular systems, either from the non-existence of vessels or their great distance; and thirdly, because the occurrence of this fat is accompanied by a complete metamorphosis (usually a disintegration) of the structures in question. These reasons, combined with the fact that like changes may occur out of the body, and thus beyond the influences of nutrition, would seem conclusive that the true fatty degeneration is not a blood deposit, but a consequence of the impairment or withdrawal of the vital power, the textures affected succumbing under the surrounding physical and chemical agencies. Mr. Paget, in his important course of lectures, supports the same opinion, “that the fat in these cases is really not a deposit in the cells, put into them from without, but one of the products of the change in their own contents.”

That in these cases some anomaly exists in the constitution of the blood is for many reasons highly probable. The formation of fibrin for the repair of the system seems unusually difficult, the effete matter being carried away by the usual channels, and an inferior tissue taking its place. There appears also an excess of free oil at times in the blood, from some imperfection in the assimilating process. Where the defect lies is not, however, so manifest. Perhaps, as the pancreatic secretion exerts a peculiar influence in rendering oily substances capable of amalgamation with the blood, we should look to that organ as in fault when the oil is not in combination with the fibrous and albuminous ingredients of that fluid. If this be reasonable we should expect to find in these cases some change in that organ sufficient to alter its secretion in quantity or quality, and its known liability to fatty degeneration would favour the supposition. It is certainly not a little singular that in the recorded cases of these diseases, the state of the pancreas has been so rarely examined. The liver has received a greater share of attention, the existence of a milky state of the serum of the blood drawn in cases of acute hepatitis, having been long since



noticed by Trail to proceed from a great increase of oily matters, which were not worked off in consequence of the injured functions of that organ. The co-existence also of fatty liver with a fatty heart has been sufficiently frequent, especially in phthical cases, to render in each instance a knowledge of its state desirable.

Among the many varieties of fatty degeneration, none have awakened more interest among modern pathologists than fatty diseases of the heart, from the importance of this organ, and the dangerous consequences that result when it is affected. The sebaceous degeneration of an ordinary muscle, or a partial fatty change in a glandular organ, may impair a function, but decay of the tissue of the heart must affect the contracting power of the great motor agent of the system. Dr. Quain has given us, in a condensed form, the results arrived at upon these diseases by other inquirers, combined with the fruits of his own interesting researches. We are happy to find that he pays a well-deserved tribute to the zeal of the Dublin school in pursuing this subject, and that he draws largely from the writings of Cheyne, Adams, Smith, Townsend, Stokes, H. Kennedy, Bellingham, and others.

One of the first points considered by the author is the determining what constitutes fatty diseases of the heart; and certainly much misconception has arisen from the arbitrary divisions followed by different writers. Thus we find some contending for two, and others for three varieties. Laennec, to whom we owe the name and the first clear distinction of sebaceous diseases of the heart, distinguishes one form as simply an accumulation of fat about the heart, not merely between the pericardium and muscular walls, but penetrating deeply between its fibres; the other form he defines as an actual conversion of the muscular substance into fat. Rokitansky, who has thrown so much light upon this subject, describes three forms, viz., first, excessive accumulation on the surface; second, intrusion of fat between the fibres, amounting even to *apparent* transformation of them, termed by him fatty metamorphosis; and a third form, first described by him, in which "the fat does not accumulate in masses," as in the other forms, "there being no fat vesicles enclosed within fasciculi of areolar tissue, but in granules imbedded among the primitive fibres of the heart's muscles." Mr. Paget and Dr. Ormerod also give a three-fold division, which we may briefly designate as, 1st, fatty accumulation; 2nd, Laennec's second form, partial deposition, in place of, not in addition to, the proper structure; 3rd, true muscular degeneration. Mr. Paget has discovered that in this form

not only is the fatty matter external to the sarcolemma, as Rokitansky thought, but that it is also within the fibril, the oil-globules coalescing gradually until they occupy nearly its whole tissue. Dr. Quain admits but two forms; in the first, termed by him fatty growth on the heart, "the fat, composed of large cells containing oil, identical with the fat found in other parts of the body, grows upon and extends over the surface of the heart; it then encroaches on and insinuates itself between the muscular fibres, in some cases to such an extent as to completely conceal them when the examination is made with the unassisted eye." Under this head, Dr. Quain seems to combine Rokitansky's two first forms. His second form is the true fatty degeneration, in which "a fatty matter, composed of granules and small oil-globules, occupies and fills the sheath of what was previously muscular fibre." These two states are succinctly described by Vogel; the one consisting of fat morbidly formed, or an increased deposition of normal fat, improper to the place; the other of abnormal fat, or altogether improper, both the contents and the structure differing from the ordinary type.

In examining more closely the first of these forms, we find a true hypertrophy of the adipose tissue, the contents of the cells being vesicular fat. As this substance extends, the muscular structure yields place and becomes wasted, constituting what Mr. Paget happily terms an "atrophy by decrease of tissue." In this form the fibre wastes and dwindles, with little or no change of its essential texture, save that its elements are gradually carried off from the system, probably in the form of urea, without being renewed. Thus, the habit of body which promotes hypertrophy of the adipose tissue involves an atrophy of the muscular, the balance being destroyed. It is rather difficult to fix the limit beyond which the heart should be called fat, as there are few hearts in which some of this substance is not found, especially at the base and in the track of the coronary arteries; and as age advances, we often find an increased growth without any perceptible injury to the health. In persons affected with general obesity, it is common to find distinct accumulation. The able researches of Dr. Chambers on this part of the subject are noticed in the review of his work in our present Number. The effects of a mere growth on the muscular parietes must impair the energy of the organ by the pressure it exerts and the inertia of its mass, while in those more advanced stages in which, like a parasitic agent, fat entwines itself round the muscular fibre, drawing away its nutriment, we have no reason to doubt that it seriously impairs its vigour,



disabling the heart from overcoming any extraordinary impediment in the circulation, and thus causing sudden death. In some of the highest examples of this kind, the muscular texture seems almost wholly removed, and replaced by a mass of fat; and a doubt occurs in such cases how the ventricles can contract, but a close examination with the microscope will not fail to detect muscular fibres between the striæ of fat, as Dr. Quain has observed, "retaining their organization, but their direction being more or less modified or distorted."

We now come to the true degeneration of the heart, designated by Rokitansky a false hypertrophy of adipose matter, being, not an addition, but a change into molecular fat. The condition to which the muscle is reduced is, like the former, a state of atrophy which Mr. Paget distinguishes from that previously described, by the term "atrophy by degeneration of tissue." As this state is preceded by change of texture, it constitutes one of Rokitansky's "secondary atrophies." The microscopic characters, by which alone the disease can be recognised, are clearly laid down by our author. These are a disappearance of the transverse striæ of the fibres, and the appearance of numerous black dots, evidently within the fibre itself, which increase in size and frequency as the disease extends. In parts much affected, these black dots enlarge and become transparent in their centre, from their oily contents. When there is a large number of them, the muscle exhibits a confused appearance, and the diseased fibre becomes friable, and loses its elastic properties, till at last its tissue is but a congeries of oil-globules. The changes produced in the nuclei of the cells have been well described by Mr. Paget. He observes, that the healthy fibres of the heart display, after immersion in acetic acid, a succession of nuclei at nearly equal distances from each other, and peculiar to the heart-fibres. In the degenerated fibre in its early stage, the outlines of the nuclei look dim and lose their colour; and as the disease advances, they altogether disappear, a circumstance which does not occur in the atrophy with mere decrease. As it is "nearly certain that the nucleus, whether of the fibre or the cell, is the chief seat or source of formative, reproductive, and secretive power," the failure of the nucleus would indicate the degeneration of the cell. He also states, as his opinion, "that the elements of the nuclei become transformed into oily matter." The contents of the cells are known to be fatty by the action of ether and their property of refracting light. It is curious that, in this form, the left ventricle is more usually affected, while the right is more frequently the subject of

fatty growth. Dr. Ormerod, who has examined a large number of cases, states that he has not seen the auricles engaged.

Of the present form of degeneration, Dr. Quain describes as two species what others consider as distinct forms, being, according to him, "fundamentally the same, and differing only in extent and degree." In the first, a small portion only of the heart is affected, but this is in its highest degree; in the other "a greater extent of the heart may become diseased, but in a less degree," such as the pale, flabby heart described as granular degeneration of the organ, in all of which cases examined by the writer fatty degeneration was found. The first of these varieties he refers to a local modification of nutrition, such as obstruction of the coronary arteries; the second, to a more extended lesion of the nutritive functions. In neither is the existence of obesity, either of the system or of the organ, an essential point, as it may or may not co-exist with these states: it is, we believe, more frequently found in persons worn down by diseases of an exhausting nature. As to the sensible qualities, Laennec has well shown that the parts engaged have lost their natural red colour, which is replaced by a pale yellow tint, like that of a dead leaf. The consistence also varies, the tissue becoming soft, so that the finger can easily break it down. Hence, to sum up, we may say that pale discoloration, softness, friability, and the altered state of the fibre render the disease sufficiently obvious.

In the series of cases given by Dr. Quain, he endeavours to establish a cause for the development of fatty diseases of the heart in either a local or a general impairment of nutrition. In twenty-five of seventy-five cases given by him, the coronary arteries were diseased, either by ossification or obstruction. Without altogether denying the connexion between fatty disease and the local cause assigned by him, and which has also been found to exist in sebaceous degeneration of muscles in other parts of the body—for example, in the case given by Vicq d'Azyr, noticed before,—we would observe, that the very condition of the artery itself implies the pre-existence of some general disturbance of the system, probably from the constituents of the blood not being in a normal state. It would seem doubtful from this, whether fatty degeneration should be regarded as the effect of this state of the arteries, or a co-existing condition, or even prior to it in point of time. It is not rare to find fatty degeneration without a change in the arteries; and on the other hand, ossification of these without fatty deposit. Still the concurrence of both states in so large a proportion of cases



deserves consideration; and a fact noticed by Mr. Swan would seem to favour the opinion. He found that the coronary arteries want the usual free anastomosis, one not being readily injected from the other; hence, when one is obstructed, the deficiency cannot be compensated by the other. The previous occurrence of disease of the outer or inner lining membrane in some of the cases of fatty heart would also favour the opinion of the effect of local causation.

The diagnosis of fatty diseases of the heart is represented by the author as more easy than we fear is the case. We admit, however, that a certain assemblage of symptoms, combined with the physical signs which we shall notice, renders the diagnosis highly probable. Dr. Latham justly observes that "there is no sure diagnosis of the fat heart before dilatation occurs, then extent of dulness on percussion, without valvular murmur, a feeble fluttering movement of the organ, felt even beyond the limits of the præcordial region, and a fatty habit of body, lead us to argue indirectly upon its existence." Dr. Hope states that the signs perceived by him were, first, diminution of the sounds, especially the first; secondly, irregular pulse, without valvular disease; thirdly, oppression or even pain in the præcordial region, with general signs of a retarded circulation, producing cerebral, hepatic, or other congestions. We should suspect *a priori* a weakened first sound, from feeble contraction of the ventricles, when the muscular walls are replaced by fat, just as Dr. Stokes has shown that, when the cohesive power of the heart is impaired in typhus fever, a weakened impulse and a diminution or loss of the systolic sound occurs. But Rokitansky proves that in certain cases a murmur might be heard, namely, when the papillary muscles are diseased; in such a case the valves would not act perfectly, their tension being feebly performed. We find also that none of the writers upon these diseases profess to diagnose one form from the other. In addition to these indications, the pulse exhibits some important peculiarity, either in point of strength, frequency, or rhythm, being commonly weak, slow, and irregular. In the class of symptoms may be remarked syncope, occasional attacks of coma (as noticed first by Mr. Adams in his valuable Memoir), dyspnœa from slight causes, and pain. Dr. Quain has given a valuable synopsis of his cases, well deserving perusal, in which he exhibits in a statistical form the relative frequency of occurrence of each symptom. We should not omit to mention a new help to the diagnosis, if Mr. Canton's statement can be borne out, in the existence of the arcus adiposus senilis as an accompaniment of fatty heart. In his lectures, published in

the *Lancet*, he asserts:—"I have in no instance found this senile arc, when well developed, unaccompanied by fatty degeneration of the heart. The ocular muscles have always been more or less in the same condition, and the extent of degeneracy in them and in the heart has appeared to me to bear a relation to the degree to which the cornea has been invaded by the deposit." When, however, the arcus adiposus occurs before the age of forty, he does not speak of it with equal confidence. It is plain that, if the above be supported by further observation, a pathognomonic sign of fatty diseases of the heart will be no longer wanting.

As to the cause of death in these diseases, it is frequently sudden, either from rupture or syncope. Dr. Quain states that in twenty-five cases out of sixty-eight rupture ensued; and in three-fourths of these it occurred in the left ventricle.

The treatment of these diseases is the least satisfactory part of our author's work, though, we fear, from causes not under his control. He dwells emphatically upon that important principle in therapeutics, not to do harm by over-anxiety about a cure. He gives a useful caution upon the risk arising from large doses of narcotic and sedative medicines, as occasionally sudden death has followed their administration. Chloroform is positively contra-indicated in these affections. In the deaths which have occurred from the inhalation of this agent, we regret that the heart has not been microscopically examined. Over-exercise, by fatiguing the heart, is equally injurious. We cannot but think, however, that Dr. Quain rather underrates the power of medicines in these cases. That one of the forms, viz., fatty growth, can not unfrequently be kept in abeyance by a regular and sparing regimen, abstinence from oily food, moderate sleep, and much exercise of a gentle kind, is highly probable from experience. The use of the liquor potassæ, combined with bitter tonics, has, in the hands of Dr. Hope and others, been attended with the best effects; and cold sponging of the body, with sedulous friction, is not without benefit in removing the sebaceous coating from the skin. According as the general obesity of the system yielded in these cases, the heart seemed to recover tone. As to the more serious form of degeneration, as it generally occurs late in life, it too often seems an index which points unerringly to that bourne to which all must sooner or later arrive.

We have thus completed our review of this excellent little Treatise, from the perusal of which we have derived both profit and pleasure. It contains, in a small space, a large fund of information upon a class of diseases heretofore little explored, and



communicated in a pleasing style. We hope soon again to meet our author in the literary field, and as the present subject is evidently a congenial one, having, he says, occupied his thoughts for years, we trust that he will continue his interesting researches upon the points still requiring elucidation.

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*A Treatise on the Etiology, Pathology, and Treatment of Congenital Dislocations of the Head of the Femur.* Illustrated with Plates. By JOHN MURRAY CARNOCHAN, M.D., Lecturer on Operative Surgery with Surgical and Pathological Anatomy, &c. &c. New York: S. S. and W. Wood. London: Thomas Delf, 1850. Royal 8vo. pp. 235.

THE remarkable affection of the hip-joint, which has been termed congenital, or "original luxation" by the continental surgeons, does not appear to have fully attracted the attention of the profession until the publication of Dupuytren's memoir upon the subject, in 1826. Since then, however, this peculiar malformation has received a considerable share of notice, and several examples of it have been, from time to time, recorded in various periodicals, more especially by the surgeons of Dublin. The treatise of Dr. Carnochan, however, is, we believe, the first monograph that has appeared on the subject in the English language, and contains an elaborate, but clear and lucid history of the symptoms, diagnosis, and pathology of this singular deformity. As we do not purpose analysing the work, an attentive perusal of which will amply repay the reader, we shall proceed to make some extracts from it, and comment on them as we proceed.

The following is the author's description of the symptoms present in cases of double congenital luxation of the femur upon the ilium:

"Upon viewing an adult person while in the erect posture, affected with this kind of double luxation of the femur upon the ilium, the curvature forwards of the lumbar region, and the convexity which the anterior wall of the abdomen presents, are apt to be among the first characteristic features of the disease which attract the attention of the surgeon. The pubic region appears to be tilted forwards and downwards, while the lower part of the trunk appears to have sunk down between the upper portion of the thighs; and this last circumstance, which actually takes place on account of the ascent of the ossa femorum, gives to the arms the semblance of being relatively too long, the extremities of the fingers ranging sometimes nearly on a level with the upper margin of the patellæ.

“Both of the great trochanters project abnormally, and are seen to have mounted considerably higher, so as to be situated nearer than is natural to the crests of the ilia, forming, with the retracted muscles which surround them, an unusual eminence, somewhat rounded on each side, at the superior and lateral part of the hip, while the lower and posterior portion of the nates is generally flatter than in the healthy condition of this region. The tuberosities of the ischia, carried outwards and more apart from each other, are denuded of muscular tissue, and covered only by the integuments.

“The fold in the groins is deeper, its direction less transverse and more vertical, and the usual niche between the buttocks and the thighs is placed higher, and more curved outwardly than it ordinarily is.

“The thighs sometimes retain their normal direction; at other times they take an oblique direction from above downwards and inwards, forming with the leg, at the femoro-tibial junction, an angle obtuse outwardly, while the knee presents internally an unusually acute angular aspect.

“As a consequence of this ascent, the psoas magnus and iliacus internus muscles of either side are put upon the stretch, and draw forwards the lumbar and lower dorsal vertebræ, and thus in the most marked degree can be seen the unnatural excurvation of the loins, with the corresponding exaggerated convexity of the anterior region of the abdominal parietes. Dupuytren says, “*ils ne touchent le sol que par la pointe des pieds.*” Observation, however, goes to contradict this assertion of the celebrated French surgeon. It would seem, in fact, that in the passive erect attitude, the patient can rest fully upon the soles of both feet; but, while the heel is descending to the ground, the lumbar region becomes still more incurved, owing to the increased traction then exercised on both sides by the tendons of the psoas magnus and the iliacus internus.

“One of the most characteristic differential signs of congenital dislocation of the head of the femur upon the dorsum ilii, is the disappearance, as soon as the patient is placed horizontally on the back, of most of the symptoms observable to the eye, when he is standing in the erect posture. The superincumbent weight of the trunk is then removed, and the muscles around the articulation now permit the great trochanters to descend to a nearly natural position; and as the small trochanters also approach their normal situation, the psoæ and internal iliac muscles becomes relaxed, and thus the curvature of the loins, and the corresponding convexity of the abdomen anteriorly, become diminished or effaced.

“By the aid of manual examination, signs are discovered not less worthy of note than those which are observed by mere inspection. If traction upon the limb be exercised, so as to act from above downwards, the limb becomes elongated, the head of the femur descends, the great trochanter becomes more separated from the crest of the ilium, and the projection they previously formed is found to have diminished; while, on the contrary, if force in an opposite direc-



tion is applied, that is, from below upwards, the head of the femur does not meet with resistance at the natural locality of the acetabulum, but mounts with facility to its abnormal position upon the dorsum ilii. The evidences of this symptom have been denied, and they have been attributed to a want of proper precaution in fixing the pelvis, while the traction was made upon one side; but in those cases where the dislocation exists on both sides, both limbs can be made to descend at the same time, and often to the same extent, when they are both simultaneously pulled upon. The only exception to this symptom occurring, is when the head of the femur has escaped from the natural capsule in which it was originally enclosed, and a new socket has been formed upon the dorsum of the ilium.

“An adult person labouring under the effects of dislocation of the heads of both femurs presents peculiarities in his gait during the diversified efforts of using the inferior extremities, which are not to be met with in any variety of lameness resulting from the other maladies occurring at the hip-joint. In walking, owing to the want of fixedness of the heads of the femurs, and the displacement which they must undergo of alternate depression and elevation, according as the weight of the body is transferred from one inferior member to the other, and also owing to the strain which is put upon the psoas and the internal iliac muscles upon the side where, for the moment, the weight of the trunk is thrown, a kind of double lameness is produced, somewhat resembling the hobbling motion of the duck. ‘The subjects so affected, when about to commence walking, are seen to elevate themselves upon the point of the feet, to incline the superior part of the trunk towards the member which is about to support the weight of the body, and to lift the other with an effort, in order to bring it forward in advance. At this moment one of the great trochanters—that which corresponds to the column of sustentation—appears to become approximated to the crest of the ilium in a greater degree than while standing upon both feet. From this mobility in the vertical direction, oscillations of the trunk take place, which render the walk as inconvenient as ungraceful. These oscillations are often accompanied by a crepitating sound loud enough to be heard at a distance of several paces.’

“Contrary to what might have been anticipated, the effects resulting from the abnormal condition of the heads of the femurs, after they have lost their natural support at the cotyloid cavity, and have mounted on the dorsa of the ilia, are less observable during the acts of running, leaping, dancing, &c., than during simple or slow progression. This can be accounted for, by the energetic contraction of the muscles surrounding the hip-joints retaining the heads of the femurs in a more fixed position during these quick movements, and by the rapid transfer of the weight of the trunk from one extremity to the other, which does not allow time enough for the heads of the femurs—thus somewhat solidly held by the muscles—to pass through their accustomed range along the external surface of the iliac bones. Protracted locomotion, however, of any kind, is not

borne well by individuals thus affected. The strain upon the muscles, consequent upon their change of direction and perverted action, the friction of the displaced heads of the femurs upon the ilia, the constant efforts kept up in balancing the body during the acts of progression, do not fail, if long continued, to produce the sensation of fatigue and pain.

“As regards the isolated movements, which can be produced at the ilio-femoral articulation thus affected, by imparting motion to it through the inferior extremity, we find that rotation can be performed without much impediment. Extension and adduction are executed with facility; but the limb can undergo abduction only to a slight extent. Flexion can be produced with great ease, and some instances are related where the limb could be made to touch the anterior part of the shoulder.

“It should be recollected, in reference to the diagnosis of this displacement of the hip-joint, that these various movements are not accompanied by pain, when moderation and not more than the requisite force is used in the examinations of the functions of the joint.”

The author then describes the appearances in cases in which the luxation is confined to one side, but we need not here dwell upon them, as the general signs are very similar to those observed in cases of the double luxation. We may, however, remark, that he has not added much to the knowledge we already possessed; indeed the admirable memoir of Dupuytren, already referred to, did not leave room for much addition to the symptomatology of this remarkable malformation.

The pathology of the affection is very fully described in the seventh chapter; and from having had repeated opportunities of investigating post mortem cases of congenital luxation of the hip-joint, we can safely say, that the author's account of its anatomical characters clearly evince that he has observed them with great care and accuracy, as the following extracts will show:

“The morbid appearances to be met with in this luxation, on autopsic examination, vary, according to the age of the individual, and to the extent of the alterations which may have occurred in the tissues at, or in contiguity to the ilio-femoral articulation; but there are pathological characters which are common, amid the numerous changes which take place in the ligamentous and osseous structures of the joint, as well as in the soft parts by which it is surrounded.

“If the examination of this displacement be made during the foetal period, or when extra-uterine life has been of short duration, the cotyloid cavity is found to be but little altered in its normal shape and dimensions, and to retain the capacity of receiving the head of the femur. The period of life at which the cotyloid cavity begins to assume an alteration of shape and dimensions is not the



same in all cases; it is probable, however, that beyond the twelfth or fourteenth year of age, the changes which this cavity has undergone have so far destroyed the normal relations of the joint, that reciprocal adaptation would be impossible.

“The acetabulum, surmounted by its fibrous border, at the earlier periods of this displacement, is generally found to present a depression on the superior and posterior part of its margin.

“The head of the femur now rests upon the margin of the acetabulum, or upon the ilium near its circumference, and presents but little deformity, retaining its hemispherical appearance, except upon its inner aspect, where it is sometimes flattened, from resting upon the ilium.

“The capsular ligament is elongated, as also the ligamentum teres; the structural integrity of both, however, is still maintained, and the capsule at this early period has been said to resemble an hour-glass, large at its pelvic and femoral attachments, and small at its centre. The capsule is put upon the stretch by the ascent of the head of the femur, which is still kept from direct contact with the external surface of the os ilium by an intervening layer of the capsule.”

“The separation between the acetabulum and the head of the femur becomes gradually greater, owing to the progressive ascent of the latter upon the ilium.”

“THE COTYLOID CAVITY, in the progress of the affection, tends to become contracted, and to assume an oval or even a triangular shape, approximating, as it were, to the primitive form of the acetabulum during foetal life, before its three component parts have arrived at the period of osseous consolidation. The acetabulum remains sometimes, however, nearly circular, and presents upon its upper semi-circumference a depression of a somewhat crescentic form, which allows the head of the femur to pass to and fro from the dorsum of the ilium into its original receptacle, now deprived of its cartilaginous lining.

“The head of the femur becomes altered to as great an extent as the cotyloid cavity, and the neck also soon participates in the progressive alterations.

“The head loses its spherical appearance, and becomes changed in its dimensions and texture. The articular cartilage, with which it is invested, having lost its relations with the articulating surface of the acetabulum, and not being naturally supplied with the synovial fluid, or with its usual amount of vascular nutrition, gradually undergoes mutations which lead to its ultimate disappearance, particularly where the head comes in direct contact with the osseous tissue of the ilium. The aspect of the head, where the round ligament ought to be inserted, often presents a flattened surface, denuded of its articular cartilage, a thin brittle shell of bone only covering the deteriorated cancellated interior structure of the head. The neck of the femur is also small, short, and stunted, and assumes a more horizontal direction to the axis of the femur than is usual, the head

being more on a level with the trochanter major, and losing its normal obliquity in relation to the shaft of the bone.

“In some instances, where the displacement has been of long standing, the head and neck are found to have entirely disappeared; the ligamentous connexions between the pelvis and the femur being attached, on the femoral side, to the trochanter major or to the upper portion of the shaft of the bone.”

These remarks upon the condition of the head and neck of the femur do not coincide with the statements of Dupuytren. We believe, however, that Dr. Carnochan's account is correct, and cannot at all agree in the assertion of the French surgeon, that the superior portion of the femur preserves, in all parts, its form, its dimensions, and its *natural relations*; for, in all the cases we have examined (in which the head and cervix remained), we have observed that the neck of the femur, instead of having its axis directed, as it naturally is, from behind forwards, upwards, and inwards, has, in this malformation, lost its usual relation with the shaft of the thigh bone, and the axis is directed upwards and almost directly forwards.

This alteration did not escape the observation of Dr. Hutton, in his remarks upon a case of congenital luxation of the hip-joint, which he brought under the notice of the British Association, in Dublin, in 1835<sup>a</sup>. He expressed his idea of the altered direction of the axis, by saying that the axis of the neck, in this case, fell *directly* on the *anterior* part of the upper extremity of the shaft; the relative position of the neck and shaft appeared as it might be supposed to do if, the lower portion of the femur being fixed, the upper were twisted *forwards*, the head moving through one-fourth of a circle.

There is another circumstance which we have observed, and which must be viewed in connexion with this altered direction of the usual axis of the neck of the femur just alluded to; it is that the head of the thigh-bone, instead of being directed *backwards*, as it is in the ordinary luxation on the dorsum ilii, has, on the contrary, been directed *forwards*, and placed beside the anterior inferior spine of the ilium, while the great trochanter has been directed backwards.

It is strange that a relative position of the bones of the hip-joint, so different from what has been observed in dislocation upon the dorsum of the ilium from accident, should have escaped the observation both of Dupuytren and of Dr. Carnochan. In a specimen of this malformation, preserved in the museum of the University of Dublin, and in two preparations contained

<sup>a</sup> Dublin Journal of Medical Science, First Series, vol. viii. p. 211.



in the Richmond Hospital museum, this relative position of the head of the femur and of the anterior inferior spinous process of the ilium exists. We do not mean to assert that it is so in all cases, for in this, as in other congenital defects, much variety may be expected to be found, but its frequent occurrence is a circumstance very important to bear in mind, when we are considering the diagnosis of the various affections of the hip-joint.

“The capsular ligament and the ligamentum teres are found also to present various phases and alterations. As a natural consequence of the ascent of the head of the femur upon the dorsum ilii, the capsule must become elongated and stretched beyond its normal dimensions. The extent of the pelvic and femoral attachments will prevent the two extremities of the capsule from coalescing, but towards its middle portion, the walls approach, producing a contracted appearance at this part, so that the capsule in the primary stages of the malady, before it has given way in its continuity, has been compared, as already stated, to an hour-glass, large at each end and contracted in the middle. The round ligament also becomes stretched and more slender, and is embraced by the central contracted portion of the capsule through which it must extend while it remains unbroken.

“The articular capsule may retain for many years its integrity, the head of the femur playing upon the dorsum ilii during progression, a layer of the capsule intervening between the head and the external surface of the ilium. At length, from continued friction and pressure, absorption takes place, and a portion of the wall of the capsule gives way, so as to allow the head of the femur to escape from its cavity, and to come in direct contact with the osseous structure of the dorsum ilii. This state of things may exist for a longer or shorter period; the head of the femur passing to and fro between its original capsule and the external surface of the ilium. The acetabulum, however, having now lost its normal configuration, permanent reduction is scarcely attainable. When the capsule has been perforated, so as to allow the head to escape from it, the ligamentum teres, becoming elongated and slender, must give way, and soon disappears. This ligament, in the early stage of the displacement, is generally found to retain its continuity.”

We have not often noticed the disappearance of the ligamentum teres under the circumstances here mentioned; on the contrary, we have found it in some cases of remarkable strength; in one case, it was an inch in breadth, and more than four inches in length, and as thick as the tendo Achillis near the os calcis. By its inferior surface it was accommodated to the head of the bone, so as to form a kind of cup which followed the motions of the femur, affording it always a recep-

tacle, as the intra-articular cartilage does for the condyle of the lower jaw. In this case the patient was thirty-one years of age.

The changes observed in the configuration of the skeleton of the pelvis are well and accurately described.

“During life, and in the erect posture, where there is dislocation upon one side only, the hip posteriorly, of the side affected, is apparently more elevated, owing to the projection of the trochanter major; but the ilium is found to have descended lower than the corresponding part of the opposite side. In the skeleton, however, the half of the pelvis, which corresponds to the dislocation, is dragged or twisted from before backwards, and from below upwards, so that the side of the pelvis upon which the dislocation has existed, is situated, in relation to the os innominatum of the sound side, upon a higher plane and more posterior, than on the side where the head of the femur has maintained its normal position.

“At the superior strait, the antero-posterior diameter of the affected half is diminished, and the symphysis pubis is drawn beyond the mesial line, in the direction of the affected side. The semi-inferior strait corresponding to the affected side, on the contrary, appears more open and enlarged laterally, and is drawn, as it were, outwards and upwards.

“The individual parts of the pelvis on the affected side, present also deviations from the natural configuration. The ilium, besides being more thin and atrophied, is more vertical and less excavated. The anterior superior spinous process of the ilium is carried somewhat inwards; the inferior anterior iliac spine is more prominent than natural, and immediately below it, and between it and the eminentia ilio-pectinea, is observed a deep groove, in which the conjoined tendon of the iliacus internus and psoas magnus has played. The transverse or horizontal branch of the pubis is longer and more slender, and is directed more obliquely upwards and backwards, than the corresponding part of the sound side.

“The ischium is drawn outwards by the pelvi-trochanteric muscles, so that the tuberosity is seen situated more externally than on the opposite side. As a consequence of the change of direction outwards of the ischium and of the descending ramus of the pubis, the long diameter of the obturator foramen is found to be disposed nearly transversely, instead of almost vertically.

“When the head of the femur is dislocated upon the ilium *on both sides*, both halves of the osseous pelvis participate in the deformity, and frequently the alterations are so nearly alike on either side, that the resulting malformations are symmetrical.

“The wings of the ossa innominata in this case, are found less dense, smaller, and more vertical; the anterior inferior spinous processes of the ilia are found prominent, and the depressions existing below them are seen to be deeply grooved by the continued traction of the tendons, which played in them during life. The horizontal



rami of the pubes are found also more slender and longer, extending considerably farther outwards, on each side from the symphysis, than in the natural state; while the body of the pubes, on each side of the symphysis, is less deep, and also more fragile in texture. The ischia are drawn outwards, and the long diameters of the foramina obturatoria run somewhat in a transverse direction, instead of being nearly vertical.

“The superior strait of the pelvis is contracted in the antero-posterior diameter, while laterally or transversely the measurement is proportionally increased.

“The inferior strait presents a contraction in the measurement from the apex of the coccyx to the arch of the pubes, while the transverse diameter between the ischia, is considerably more ample than in the natural pelvis.

“*Analysis of the Malformations of the Pelvis.*—The extent of the deformity which pervades the pelvis of individuals who are affected with congenital dislocation upon the dorsum ilii, must in a great degree be subordinate to the extent of the displacement of the head of the femur, and also to the length of time the luxation may have existed. The characteristics, however, of these malformations are generally so similar and definitely marked, that they can be chiefly referred to a set of anatomical causes which must always exert their influence during the existence and progress of this affection.

“The escape of the head of the femur from the confines of the acetabulum, and its ascent upon the dorsum ilii, will necessarily change the direction and relative action of all the muscles inserted into the upper portion of the femur. The psoas magnus and iliacus internus, on each side, when the luxation is double, will be put upon the stretch in proportion as their points of insertion at the trochanter minor are dragged upwards during the ascent of the head of the femur.

“The quadratus femoris, the gemelli, the obturatores, the pectineus, and probably the upper portion of the adductor magnus, attached on the one side to the pelvis, and on the other to the upper portion of the femur, are also put upon the stretch by the removal of their points of insertion at the femur to a greater distance from their points of origin.

“These abnormal results, in the configuration of the pelvis, brought about by the perverted action of the pelvi-femoral muscles, are materially augmented by the influence which the weight of the body exerts upon the muscles, during locomotion, after the heads of the ossa femorum have escaped from the limits of the acetabula.”

We are at present unable to allude to the other portions of this valuable monograph; but we cannot avoid expressing our regret that the author did not visit Dublin before his return to America. Had he done so, he would have seen numerous examples of the remarkable affection to which he has so successfully devoted a large share of his attention, and he would have

become acquainted with the cases recorded by Dr. Hutton and Mr. Adams, to whose accounts of the malformation in question he has not alluded. The work is illustrated with several finely executed plates, which convey an excellent idea of the symptoms and anatomical characters of the affection. To all who take an interest in this department of medical science, the elaborate treatise of Dr. Carnochan will afford much valuable information.

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*Corpulence; or, Excess of Fat in the Human Body: its Relations to Chemistry and Physiology, its Bearings on other Diseases and the Value of Human Life, and its Indications of Treatment. With an Appendix on Emaciation.* By T. K. CHAMBERS, D. M., &c. London: Longmans. 1850. Post 8vo., pp. 166.

THIS interesting and useful little volume is devoted to the consideration of a disease which is too frequently regarded merely as an indication of robust health. Dr. Chambers having been appointed to deliver, in the spring of last year, the annual course of lectures before the College of Physicians of London, as their Gulstonian lecturer, with much judiciousness selected for his subject the inquiry into the effects of the excessive development of fat in the human body. The lectures, as originally delivered, were published in the *Lancet*, and, having been revised by the author, are now presented to the profession in a separate volume. But few works have hitherto appeared on obesity or polysarcia, and, as the author correctly remarks, the subject has been treated "more as a matter of curiosity than of true practical importance, and cases have been collected rather to furnish amusement than increase knowledge." Yet there can be no question as to the practical importance of the study of a condition of the human body which not alone tends to shorten the duration of life, but frequently to render it a burden to the individual.

Dr. Chambers distinguishes the natural deposit of fat from that which Rokitansky has termed "false hypertrophy," denominating the former *vesicular*, and the latter, *molecular* fat. The one must be regarded as the natural or healthy condition of adipose tissue; the other as a diseased production. About the names we will not quarrel, although we cannot regard them as accurate or sufficiently diagnostic.

The author devotes considerable space to the explanation of the phenomena of the healthy deposit of fat, before consider-



ing it as a disease. Natural fat is found in vesicles, each vesicle being supplied by distinct capillary blood-vessels. An increased development, then, of this tissue, even in a healthy state, must powerfully affect the organs of circulation.

“If, for instance,” says Dr. Chambers, “a man of five feet two inches, whose healthy weight would be eight stones, increases to twenty-eight, no less than twenty stones of additional fat have to be supplied with capillaries, and these capillaries have to be supplied with blood by vessels constructed to circulate but one-third of the quantity.”

This, then, is sufficient evidence that what by the world might be regarded as only an indication of rude health, is attended with an over-taxation of vital power.

In his second and third chapters the author considers the immediate connexion which exists between oleaginous food and the deposit of fat in the body, and proves by a series of interesting facts, deduced from the investigations chiefly of modern physiologists and chemists, most of which are familiar to our readers, that fat is possibly formed from all proximate principles of diet, but that nature's favourite material for its production is oleaginous food. To this he ascribes the instinctive desire of man for an oily diet, and its association with notions of luxury in all times. Its influence, however, we think, is not so distinctly proven as Dr. Chambers seems to imagine; for we are acquainted with numerous instances which are directly opposed to his conclusion. Some of our *fattest friends* are most abstemious in their diet, no matter of what it may be constituted, and absolutely abhor all sorts of rich food. Moreover, the theory is altogether inconsistent with the variety of condition which infants at the breast present. The excessive growth of fat must, we think, rather be ascribed to congenital peculiarity, to a low development of the nervous and circulatory systems, and to hereditary transmission. Observations derived from experiments on the lower animals cannot fairly be brought to bear on man, whose mental activity influences so much his digestive powers. For our part, we regard the condition of the nervous energy of almost more importance, as regards the accumulation of fat in the body, than that of the digestive organs, or of the food taken into them.

Fat being to a certain extent an indication of health, the first question that naturally arises is, to what degree must it be deposited in the system before it can be regarded as in excess, or, to speak with our author, as constituting a disease? Weight

is, according to Dr. Chambers, the best measure of fat; for although bone and muscle may, under certain circumstances, be much augmented or largely developed, the alterations in their proportionate magnitude affect but little the comparative weight of the whole body.

“An ordinary human skeleton rarely comes up to fourteen pounds, and for a man’s weight to vary a stone from the standard of averages is of no account.

“An example, which I will cite, of hypertrophy to a remarkable extent of the bones and muscles, will point out to what a small degree these organs affect the weight. The measurements below were taken from a French gardener, a cast of whose hand I have in my possession, through the kindness of Mr. Brent.

Circumference of Neck,	. . . . .	18	inches.
„ „	Breast, . . . . .	44 $\frac{1}{2}$	„
„ „	Forearm, . . . . .	13	„
„ „	Wrist, . . . . .	8 $\frac{1}{2}$	„
„ „	Palm of hand, . . . . .	11 $\frac{1}{4}$	„
„ „	Calf, . . . . .	17	„

“If you compare these with the corresponding parts in your own persons, you will easily judge what a strange ungainly figure he must present to the eye. Yet he weighs, clothes included, but sixteen stone. You would never have found by the balance that his bones and muscle were of such huge dimensions. The reason is, that he has but very little fat upon his body.”

In the young, however, increase of weight is not so true a test of development of fat; for in them the *growth* of muscle, of bone, and of the variety of material of which the body is composed, must be taken into account and duly allowed for; while, in the adult, *growth* having comparatively ceased, any increase of weight much beyond what is ordinary must be attributed to deposit of fat. But can we lay down any standard or precise rule of healthy weight? This we cannot do, for it is evident that peculiar occupations will admit of a greater or less degree of fatty deposit, compatible with health; but all sudden or rapid increase in weight beyond the ordinary condition must be regarded as indicative of what, we think, may well be termed *fat disease*. That there are limits also proportioned to height and age is sufficiently evident, and these are easily judged of. Dr. Chambers gives the following table, from a paper by Dr. Hutchinson, published in the Transactions of the Medico-Chirurgical Society of London, for 1846, in which the average weight in health is deduced



from observations made on 2650 healthy men, between the heights of five and six feet:

HEIGHT.		WEIGHT.	
Feet.	In.	Stones.	lbs.
5	1	8	8
5	2	9	0
5	3	9	7
5	4	9	13
5	5	10	2
5	6	10	5
5	7	10	8
5	8	11	1
5	9	11	8
5	10	12	1
5	11	12	6
6	0	12	10"

A very important question is shortly considered by the author in this, the sixth chapter, namely, the development of fat as an element in calculations of the value of human life, with reference to life assurance; and we fully agree with him in the view which he takes, and the stress which he lays on its practical importance. We have before referred to the additional labour thrown upon the heart by the increased capillary circulation, and by this are caused a deranged condition of the supply of blood throughout the body, and a consequent tendency to abdominal congestions and apoplexy. As the author well observes, "when it is remembered that four-fifths of the losses at assurance offices arise from apoplexy and consumption," the weight test can scarcely be over-rated. While, therefore, we lay much stress on augmentation of weight as an evidence of a departure from health, we should not the less notice its sudden or gradual diminution. All persons undergo variations, both in decrease and increase, which are altogether compatible with health, and can seldom be ascribed to any obvious cause:

"Thus, most persons are heavier in winter than in summer, and with some the change takes place with great regularity. A medical man of my acquaintance, who has weighed himself for some years with strict attention, finds that at the beginning of May he commences losing weight, and falls down nine pounds from his ordinary average. He remains light till the 1st of September, and then he begins to increase till he has returned to his ordinary bulk, which he retains till the next May again reduces him. He had resolved, several summers, to give up his profession, till he found that the emaciation was due to the season, and not to real ill-health. This loss in summer and gain in winter is curiously coincident with a fact which bare superficial theory would not have taught us to ex-

pect, viz., that the carbonic acid passing away by the lungs is greater in the cold than the warm season; that is, that carbon passes off by the respiration in greatest abundance at the same time that it is also fixed in largest proportion in the body. Our present knowledge of physiology does not enable us to account for this; and we can only conjecture that in winter, fat, and foods which make fat, are taken into the blood more copiously than at other seasons."

In his seventh chapter, Dr. Chambers gives a general account of the cases of obese persons, thirty-eight in number, from which his deductions are drawn; twenty-six of these were collected by himself, and are instances of persons still alive, and in moderate health. As the result of his observations, it appears that obesity may commence at any period of life, sometimes beginning immediately after birth; but in such cases the children seldom live long, usually dying of suffocation. A minor degree of fatty development, as must be known to our readers, is not uncommon in infancy; but being usually caused by excess of too highly nutritious food, may be readily controlled by a proper regulation of diet. The author notices a singular fact, that while infantile obesity is not more common in the families of corpulent persons than in others, the form which affects the succeeding period of life is almost always due to hereditary disposition.

Independently, however, of the general deposit of fat tending to shorten the duration of life, the occurrence of irregular and partial obesity, especially where the fat is deposited in the omentum, constituting the pendulous abdomen, must not be overlooked. Dr. Chambers believes the latter to be a great shortener of existence, by the diseases to which it gives rise, and with him we fully agree, although we do not think that he fully or accurately explains the cause of this tendency. It is to be referred, not alone to the sedentary, or, more correctly speaking, lazy habits, which this condition engenders, but to the increased labour thrown upon the other muscles of respiration by the want of assistance from those of the abdomen, to the consequent imperfection of the function of respiration directly, and to the derangement of the central organs of circulation indirectly. We thus have fertile sources of local congestion, of inflammatory affections, of apoplectic tendencies, and of nervous diseases. Fatty disease of the heart, too, is an important form of its partial deposition. This takes place most frequently in persons who have a general tendency to the development of fat, but it sometimes occurs also in individuals not so disposed, of which the author gives several instances. For a complete account, however, of this part of the subject,



we refer our readers to the review of Dr. Quain's excellent monograph in our present Number.

In his eighth chapter, Dr. Chambers considers the predisposing and exciting causes of obesity.

“In persons prone to obesity, we may usually observe, that the bony framework of the body is less massive than in the spare, as is indicated by the smallness of their hands and feet. In the great majority of the cases before us, this peculiarity has been noticed in the column appropriated to it. The same is commonly seen also in cattle; in buying beasts likely to fatten well, the grazier will select those whose legs below the knee are short and taper, and refuse the long-backed, heavy-hoofed ox. This shows that bone has had little to do with the great weights of the obese persons recorded in the list. Their osseous skeleton, the part of their body which is of the greatest specific gravity, is smaller than that of other people, yet the whole body is much heavier. This confirms what was suggested in the former chapter, that extreme weight in the human species may be always considered as due to bulk of adipose matter, and not to excess of bone. A sufficient quantity of bone added to the body, to make a person come nearly up to any of the weight of these corpulent individuals, would render the skeleton too clumsy to answer the ordinary purposes of life. A man can move about and work with eight or nine extra stone of fat about him, as, for instance, R. B. (No. 31), who is a miller in constant employment day and night; but if that quantity of bone was laid on his skeleton, the muscles would be unable to wield the deformed limbs. The weight of a man's bones, in the dry state, with the ligaments attached, does not exceed a stone at most, and it is easy to guess how its relation to the muscles would be altered were it quadrupled in size only.

“In persons of hereditary obesity the skin is usually fresh coloured and dry; the hair soft and fine.

“In the urinary organs I am not aware that they differ in any respect from others.

“In youth and middle age the digestive apparatus performs its task usually with rapidity; and in cases where fatty hypertrophy is general throughout the body, I have not observed that tendency to constipation which is sometimes said to accompany obesity. The action of the bowels is generally natural, and in some cases loose. But where the accumulation of fat is principally in the omentum, that pendulous state of abdomen is apt to be produced, which, causing a displacement and dilatation of the bowels, makes those, which were naturally loose and active, sluggish or irregular.

“The respiratory function in obese people presents us with a well-marked and very universal peculiarity. The volume of air which these people are capable of containing in or expiring from their chest is considerably less than the average quantity of those of their height. The lungs, instead of holding more air because the body is larger, appear, in these cases, of diminished capacity.”

Hereditary predisposition is, according to Dr. Chambers,

more decidedly marked in obesity than in any other disease; the proportion being, in insanity, 13 per cent; in consumption,  $24\frac{1}{2}$  per cent.; and in the cases of obesity collected by the author,  $84\frac{1}{4}$  per cent.

Of the exciting causes, the most common is an acute attack of illness, the tendency being then very probably occasioned by the necessary confinement attendant on it. Chronic diseases, which do not injure the constitution, and accidental surgical injuries, are consequently fertile sources of this change in the system. Of occupations, those which combine a moderate amount of labour with plenty of fresh air predispose most to the development of fat; of this fact, the coachman's life is a good example.

In the ninth chapter, the anatomical characters of obesity are considered. The most important deviations from the healthy condition are increase in volume and weight of the tissue affected, and, as we have already noticed, the augmentation in extent of the capillary circulation. The latter is the chief predisponent to disease, and affords a satisfactory reason why corpulent people bear depletion so badly, even in the most inflammatory affections. It is, therefore, a point of much practical importance, and one justly insisted on by the author, as regards the treatment of disease in such persons. The effects produced by this condition of the circulation are well illustrated by the following account which he gives of the causes of death in sixty-nine corpulent persons, the post mortem records of whose cases are, he says, to be thoroughly trusted:

*“ Medical Cases.*

Dropsy, . . . . .	13
Apoplectic Coma, . . . . .	11
Pneumonia, . . . . .	5
Pleurisy (acute 2; chronic 1), . . . . .	3
Fainting (fatty atrophy of heart), . . . . .	1
Aneurism, 1; malignant disease, 1; fever, 1; rupture of stomach, 1; polypus uteri, 1, . . . . .	5
Erysipelas of face, . . . . .	1

*“ Surgical Cases.*

Peritonitis after hernia, . . . . .	8
Erysipelas after ulcers and slight wounds, . . . . .	3
Gangræna senilis, . . . . .	2
Diffuse cellular inflammation, . . . . .	2
Secondary abscess, . . . . .	3
Nephritis after lithotripsy, . . . . .	1
Diseased prostate, . . . . .	1
Accidents, . . . . .	10



“ The heart was examined in fifty-seven of these patients. In seven it was found healthy—viz., in four who died from accidents, in one case of rupture of the stomach, one of hernia, and one of nephritis. In the latter case, the principal local collection of fat was about the kidneys, where the amount usually found was greatly augmented.

“ In fifty of the fifty-seven cases where the heart was examined, it was found diseased,

“ Of the fifty diseased hearts,

5 were hypertrophied and not dilated;

8 hypertrophied and dilated;

26 dilated only;

11 atrophied.

“ In sixteen of these there was an increased amount of vesicular fat about the heart—viz.,

In 13 of those which were dilated;

In 2 of those which were atrophied;

In 1 of those hypertrophied and dilated.

“ In fourteen instances the kidneys were also affected with chronic degeneration, which in all those where an opportunity occurred of forming an opinion, seemed to be consecutive on the cardiac disease.”

In the tenth chapter, the treatment of obesity is considered. The congenital form of the disease, which commences at or immediately after birth, and increases rapidly, is, the author believes, not amenable to treatment, causing death almost invariably before puberty: he justly, we think, regards it as a species of monstrosity. For the other forms of the disease, however, he lays down judicious rules of treatment, by which, he says, that although we may not be able to reduce our patients to an average size and weight, we may render their life comfortable. The author especially advises strict attention to diet, and the avoidance of all articles which are digested into fat: under this head some excellent practical rules are given as to the amount of food which should be taken, and the period of meals. Sleep and exercise, as remedial agents, are also duly considered; and Dr. Chambers truly remarks that regiminal rules on these points, and on diet, must be considered as of primary importance in this affection. Medicines are secondary and auxiliary, and of them he treats under the heads of sudorifics, purgatives, alkalies, bleeding, tonics, vinegar, diuretics, and iodine. His observations on these we cannot condense; they are too valuable; and we shall merely state that he places the alkalies in the first rank, for their powers in reducing obesity; and of them he especially commends the use of liquor potassæ given in milk and water; the dose to be com-

menced with should be half a drachm, and this may be gradually raised to a drachm and a-half three times a day.

The work concludes with a table of cases of obese persons, and an Appendix on Emaciation, in which its causes, character, and treatment are concisely considered.

We cannot part with Dr. Chambers without commending most highly his little volume; it is both instructive and interesting, and, on a small scale, presents a model of how such an inquiry should be conducted.

1. *Elements of Materia Medica and Therapeutics.* By JONATHAN PEREIRA, M. D., F. R. S., &c. Third Edition. Vol. II., Part 1. London: Longmans. 1850. 8vo. pp. 899 to 1538.
2. *Medicines: their Uses and Mode of Administration; including a complete Conspectus of the three British Pharmacopœias, an Account of all the New Remedies, and an Appendix of Formulæ.* By J. MOORE NELIGAN, M. D., M. R. I. A., &c. Third Edition. Dublin: Fannin & Co. 1851. 8vo. pp. 555.

THE *Materia Medica* of Dr. Pereira is, as he truly terms it, an *encyclopædia* of this branch of medical science. Unrivalled in any language for the amount of information it presents on the general history of drugs, their physiological action, and medical uses, it constitutes a vast store-house of information for the student and practitioner. We therefore gladly receive this instalment towards the completion of the third edition, and we hope shortly to be able to announce the publication of the remaining portion of the second volume, which will complete the work.

For obvious reasons we can do no more than announce the appearance of the third edition of Dr. Neligan's book. Amongst the new medicines now, for the first time, described in it, may be mentioned chloroform, of the uses and administration of which the following account is given:

“ Since its discovery, chloroform had been more or less used on the Continent and in America in the liquid form as a sedative, but was very little employed in this country. The chief diseases in which it had been administered, with benefit, were asthma, spasmodic cough, and cancerous and other painful affections; in cancer, it is most highly praised by Mr. Tuson, of London, but general experience has not confirmed his extravagant statements. More



lately it has been given with good effect in obstinate vomiting, in asthma, and in hysteria; it has also been employed in the treatment of spasmodic cholera. Externally applied, it allays pain and local irritation, and is therefore used with good effect as an addition to liniments or ointments in neuralgia, muscular rheumatism, and cutaneous diseases, attended with itching, especially prurigo, and lichenoid eruptions; it may also be applied undiluted in these affections. But it is for its effects when inhaled in the form of vapour, that chloroform has become so important a therapeutical agent. Towards the close of the year 1846 the discovery was made in the United States of America, that a state of partial coma with insensibility to pain could be produced by the inhalation of the vapour of sulphuric ether; and this discovery was rapidly taken advantage of, for the purpose of preventing any suffering to the patient during surgical operations. It was almost immediately found, however, that ether inhalation was very uncertain in its effects, producing in many persons violent excitement, spasmodic action of the muscles, and delirium, and in some instances death even followed its employment. The attention of the members of the profession, over the whole globe, I might say, was therefore at once actively engaged with the view of discovering a safe and effectual substitute for it; the honour of this, one of the most important discoveries of modern times, fell to the lot of Professor Simpson, of Edinburgh, who, in November, 1847, ascertained that chloroform possessed the desired properties. The vapour of chloroform when inhaled in quantity not exceeding that evolved by half a drachm, produces a feeling of fulness in the head, dizziness, and partial loss of consciousness, with usually pleasurable sensations: the effects vary according to individual temperament, but in all they more or less resemble semi-intoxication. If the quantity inhaled be augmented, total insensibility is quickly produced, usually in from thirty seconds to two minutes, the insensibility being marked by slight stertorous breathing, muscular relaxation, and fixing of the eyes. If the inhalation be now stopped, perfect consciousness will be restored, usually in from five to six minutes, the individual recovering without any remembrance of what had taken place. The circulation is but little affected during the state of anæsthesia, the strength of the pulse being generally diminished, while its frequency is increased. The anæsthetic condition may be kept up for hours with impunity, as is often done in childbirth, by a cautious continued use of the inhalation. The therapeutical applications of the inhalation of chloroform are sufficiently manifest, its effects being so fully explained above; but the two purposes for which it is specially used require to be shortly noticed, namely, the prevention of pain during surgical operations and in childbirth. At first, much opposition was given to the employment of anæsthetic agents for the induction of insensibility during operations, and the occurrence of an occasional fatal case, even where chloroform had been inhaled with all due precautions, still affords its opponents an argument against its use;

but the magnitude of the boon conferred is so great, and the proportionate risk of ill effect so small, that it is now used almost universally by surgeons in even the most trivial operations. There is one class of operations,—the reduction of dislocations, in which it not only prevents pain, but by its relaxing effect on the muscular system removes all difficulty in the reduction, so that the complicated apparatus of compound pulleys, &c., is no longer required. In the reduction of strangulated hernia, and in the introduction of a catheter in spasmodic stricture, its relaxing effects are also especially advantageous. In operations about the mouth and nose only is the production of anæsthesia contra-indicated, and this depends on the danger that might result from the flow of blood into the air passages during the insensible state of the patient. It is, however, to the use of chloroform during child-bearing that most opposition has been given, and a fierce controversy has raged between obstetrical practitioners on the subject, since it was first employed by Professor Simpson; scripture authority even being brought to bear on both sides of the question. But as I am not myself a practitioner in midwifery, and consequently cannot speak from personal experience, I wish merely to deal with facts. In Edinburgh anæsthesia is induced—to speak in general terms—in *every case* of labour, natural or preternatural, and with safety to both mother and child; while the opinion of the majority of accoucheurs in this and most other large cities, as far as I can judge from what has been written on the subject, is well expressed in the following extract from the second edition of Dr. Churchill's *Midwifery*:—‘As to its exhibition in *natural labour*, as I do not believe that in the large majority of cases convalescence is at all impeded by the suffering, I cannot see the necessity, or even the propriety of urging the employment of anæsthesia in every case; and I do feel that even greater caution ought to be used than in operative midwifery. We may be justified in running some risk when an important point is to be gained, such as perfect quietness during an operation, which we should not be justified in incurring merely to relieve pain; thus, in hysterical or nervous patients, in those labouring under nervous affections or organic diseases of the lungs or heart, &c., I do not think we ought to employ it.’ It is right, however, to add, that in no instance has a fatal result followed the inhalation of chloroform in midwifery practice. In conclusion, anæsthesia has been employed in the treatment of asthma, delirium tremens, hysteria, neuralgic affections, &c.: but our experience of it is too limited as yet to draw any conclusions as to its therapeutic value in these affections. In one case of hay asthma I have seen the access of the disease kept off by constantly smelling chloroform, which the patient carried about with him in a bottle for the purpose.

“*Dose and Mode of Administration.*—Internally in the fluid form, min. v. to min. xxx. suspended in water by means of mucilage or dissolved in it with the aid of a little spirit; in consequence,



however, of its great volatility, it should always be prescribed in draughts: for external use f3j. to f3iv. may be mixed with half a pint of any liniment, or f3ss. added to 3j. of an ointment. *Anæsthesia* is usually produced by the inhalation of the vapour produced by from f3j. to f3ij. It is most effectually and safely administered in the manner first proposed by Professor Simpson: namely, by pouring the chloroform into the hollow of a handkerchief folded in the form of an inverted cone; at first f3j. only should be used, and if the desired effect be not produced in about two minutes, the same quantity should be renewed. Various forms of *inhalers* have been proposed for the administration of the vapour of chloroform, but I must confess that I prefer the simple handkerchief. The chief points to be attended to are:—1st, that the patient should be lying on his back with the head slightly raised; 2nd, that he should be permitted at first to breathe atmospheric air mixed with the chloroform, which is effected by not bringing the handkerchief too close to the mouth and nose at once; 3rd, that the vapour should be altogether withdrawn as soon as insensibility is produced, which is usually evidenced by the occurrence of slight stertorous breathing, for the condition can be kept up for any length of time that may be requisite, by the occasional reapplication of fresh chloroform in the handkerchief; 4th, the patient's stomach should be empty when the inhalation is commenced, as otherwise vomiting is apt to be produced; and 5th, should fainting or other evidence of sinking occur, the best restorative is atmospheric air; ammonia also may be applied to the nostrils, the cold douche on the head used, or even artificial respiration may be had recourse to, *but no stimulants should be given by the mouth*. There is but one other remark which I have to make for the benefit of those inexperienced in the use of chloroform, namely, that during the process of inhalation, just before insensibility is produced, there is usually a struggle on the part of the patient; *this must be resisted, and the charged handkerchief kept just at that time closely applied to the mouth and nostrils.*"

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*Of the Crystalline Lens and Cataract.* By BERNARD EDWARD BRODHURST. London: Churchill. 1850. 8vo. pp. 243.

THE first section of this essay is occupied with an account of the following subjects:—The anatomy of the crystalline lens; the lenticular capsule; aqua Morgagni; the physiology of the lens; and the iris.

The second section treats of the general characters of cataract.

In the third, the author takes into consideration the diagnosis, prognosis, and different forms of cataract, together with the various operations proposed for their cure.

We have read Mr. Brodhurst's book with attention, espe-

cially the chapter devoted to the subject of cataract, which occupies 185 pages of the work; and we are of opinion, that there is nothing of a practical nature contained in it, which may not be found in any of the text books on the subject, already before the profession.

We do not wish to deal harshly with a gentleman on his first appearance in the garb of an author, but it is the duty of an impartial reviewer to inquire into the opportunities of observation enjoyed by a physician or surgeon, who undertakes to enlighten his brethren on an important branch of the profession, by writing a monograph on the subject.

Mr. Brodhurst does not appear to be connected with any institution devoted to diseases of the eye; and in fact, the only interesting portions of the essay are notes of cases seen by the author during a prolonged visit to the continent of Europe, and which chiefly occurred at the "Josephinum" in Vienna, under Professor Jäger, or under the care of Rosas.

We have always maintained that no one is justified in undertaking to write a practical treatise on any important branch of medicine or surgery, until he is in a position to bring with him a considerable amount of personal experience; and this opinion, we are pained to say, is, in our mind, peculiarly confirmed by the book before us. Should Mr. Brodhurst be fortunate enough to obtain an appointment as surgeon to one of the British ophthalmic institutions, a position to which his ambition is evidently directed, we shall be happy to meet him hereafter, when we may probably look on him in a very different light from that in which he at present appears—a mere book-maker.

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*Introductory Address on Medical Education, with especial Reference to the Course of Study required for the Degree of M.D., in the Queen's University, Ireland.* By ALEXANDER FLEMING, M.D., Professor of Materia Medica and Dean of the Faculty. Dublin: Hodges & Smith. 1850. 8vo. pp. 32.

AT the opening of each medical session in London, the custom of delivering introductory addresses, and of publishing them afterwards, is still religiously observed; but in our Dublin schools, although introductory lectures are occasionally given, their authors very rarely esteem them of sufficient importance to be clothed in the garb of a pamphlet. In this, we think, they exercise a wise discretion, for unless the proper intention of these addresses, that of offering advice and giving elemen-



tary directions to the junior student, be altogether departed from, we do not see how they can be made to contain sufficient novelty or interest to render their perpetuation in type of advantage either to their author or to the profession.

These remarks, however, do not apply to the introductory address now before us. A great experiment, as regards medical education, is being tried in Ireland: three colleges have been established in the provinces, as branches of a new metropolitan University, in which degrees in medicine (we are speaking of our own profession merely) are to be granted by royal authority; and it was necessary, therefore, that the proposed system, in order to receive a fair trial, should be fully laid before the professional public. This has been well done by Dr. Fleming, in the lecture which he, as Dean of the Faculty, delivered at the opening of the medical department of the Queen's College, Cork, at the commencement of the present session. A perusal of this address we strongly recommend to our readers; its style is flowing, correct, and free from the hyperbolical phraseology with which introductory lectures so usually abound; and in addition to its including, as the title intimates, a review of the course of study demanded by the regulations of the Queen's University, it contains some admirable observations, conceived in the high tone we should have expected from the lecturer, on medicine as a science, and on the manner in which it should be viewed by the student. We extract for illustration the following paragraph:

“I would remind you, also, of your obligations to your profession, that you may endeavour to reflect upon it a portion, at least, of the honour it confers upon you. The elevation generally of the profession in the social scale will be accomplished solely by the improved knowledge, virtues, and usefulness of its individual members; and you need not indulge the hope that any measure of medical reform or legislative enactment will raise our status otherwise than by enforcing a better training of the youth destined to medicine, and higher general and professional acquirements.”

## PART III.

### REPORTS, RETROSPECTS, AND SCIENTIFIC INTELLIGENCE.

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#### PROCEEDINGS OF THE PATHOLOGICAL SOCIETY OF DUBLIN.

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##### ELEVENTH SESSION.—1850-51.

*Pneumonic Abscess.*—Dr. Corrigan presented a specimen illustrative of the pathology of pneumonic abscess. On the 16th February 1850, a man was admitted into the Whitworth Hospital. He stated that he had been for a long time addicted to intemperate habits, and in consequence of his propensity in this respect, had suffered from an affection of the larynx during the preceding winter, accompanied by cough and considerable difficulty of swallowing. On admission, he complained of pain in the left side and shortness of breathing; and upon percussing the chest, a well-marked dulness was observed at the base of the left lung posteriorly, and a slight degree of dulness anteriorly. In fact he presented the ordinary symptoms of a mild attack of pleuro-pneumonia. For this complaint the patient was placed under the influence of mercury, and was so much improved at the end of five days as to be pronounced convalescent, and almost fit to be discharged. On the 26th February, however, he was suddenly seized with pain in the left side, and his pulse rose to 100, and was remarkably weak. On the 28th, Dr. Corrigan found him lying on his left side, in bed, in a state of profuse perspiration, and expectorating matter of a dark rusty colour, resembling the “prune juice” expectoration of Andral. The smell of this expectorated matter was intolerably fetid. Muco-crepitating râles were at the same time heard over the whole of the left side of the chest, and the patient appeared to be rapidly sinking. The perspiration continued to distress and weaken him, the sputa continued fetid, and on the morning of the 5th March, Dr. Gordon drew his attention to a new symptom, intense gargouillement, accompanied by a slight amount of metallic tinkling, which were detected at a spot corres-



ponding with the inferior angle of the left scapula. He died on the next day, the 6th March.

*Autopsy.*—On cutting through the structure of the left lung, it was found much congested, and the bronchial tubes were filled with purulent and fetid matter similar to that which was expectorated during life. A large cavity was discovered in the middle of the base of the lower lobe; it was lined by soft lymph, evidently of recent formation. The character of this membrane was very striking, and the boundary between the abscess and the remainder of the lung was so well marked as to convey the idea of a cavity lined with wetted parchment. The membrane was evidently of recent formation, and no appearance of disease could be detected beyond it; the lung being elsewhere permeable to air, and, with the exception of a certain amount of congestion, perfectly healthy.

Dr. Corrigan observed that the present was one of five cases of a similar description which had fallen under his observation. In the first of these cases the patient was attacked with pneumonia whilst in London, and for a period of two or three months after the attack he expectorated purulent matter, which was not, however, fetid, as in the present case. At length he suddenly died from hemoptysis, and it was discovered that both lungs were sound, with the exception of a cavity in the same part of the lung as was attacked in the present case, namely, the lower lobe of the left lung. In the second case, which occupied a period of two or three years, the patient recovered after having suffered from repeated attacks of expectoration of a fetid character. The disease in this instance seemed to be intermittent, for the patient sometimes passed twenty-four hours without expectorating, and then, perhaps, he would be suddenly seized with symptoms of suffocation, and throw up a quantity of purulent matter. He would then return to his former state, and some time would elapse before he experienced another attack.

In the third case the disease was situated in the inferior lobe of the right lung, and the patient recovered. In the fourth case there were abscesses in the liver as well as in the lung; but the abscesses in the former had no means of communication with the lung. The patient, as in the preceding case, used to be suddenly seized with difficulty of breathing, in consequence of the air tubes becoming filled with purulent matter. In a fifth case, the patient had a discharge of purulent matter from the intestines. In the case before the Society, the abscess came very close to the surface, which accounted for the gargouillement and metallic tinkling. He brought it forward as a contribution to the pathology of abscesses in the lungs, which, as yet, had not been sufficiently studied; for, though patients affected with pulmonic abscess recovered very slowly, still the cases he had mentioned sufficiently showed that persons would recover from the disease. The fetid expectoration, these cases demonstrated, was not necessarily connected with gangrene of the lung; and consequently if the sudden sinking and other constitu-

tional symptoms which invariably attended gangrene of the lung were not present, he was of opinion that the presence of the fetid expectoration was to be regarded as diagnostic of a pulmonic abscess, and, of course, as a circumstance rather favourable than otherwise, as regards the recovery of the patient.—*March 9, 1850.*

*Endocarditis; Disease of the Mitral Valves.*—Dr. Stokes drew the attention of the Society to a specimen taken from the body of a young man, who died lately in the Meath Hospital, with symptoms of disease of the heart, and which, in his opinion, illustrated the supervention of acute endocarditis in a heart which had been previously affected with chronic mitral valve disease.

The patient stated that he had been subject to dyspnœa and palpitation as long as he could remember. He came to the hospital with symptoms of acute bronchitis affecting an emphysematous lung, his chest inflated to a great degree. At that time, it is important to observe, that no valvular murmur was detected in the heart. In a few days, Dr. Stokes remarked that a great change had taken place in the patient. He became feverish, the heart was violently excited, and then a loud murmur, corresponding to the region of the mitral valve, was heard. His first idea was, that the patient had been attacked with pericarditis; but, after the lapse of twenty-four hours, no friction sound being heard, he came to the conclusion that it was endocarditis. The boy died from the attack.

*Autopsy.*—Upon dissection, it was found that the sac of the pericardium was obliterated by old adhesions. The heart was somewhat enlarged, and the internal membrane of the aorta bright red; the valves of the aorta of a blood-red colour, and as it were, villous. The interesting portion of the case was, that the mitral valve exhibited marks of very ancient disease. Its ventricular aspect was nearly circular, while in the auricular face of the opening ragged ossific concretions of small size, but in great number, existed. This case, he considered, might be held as an additional example of the fact, that there may be valvular disease existing without the development of murmur, until from some circumstance, either inflammation, mental excitement, or the use of stimuli, the heart becomes excited, and then the valvular murmur is developed. In the present case the valvular murmur was not discovered until symptoms of endocarditis set in; so that there may be a valvular murmur in connexion with acute endocarditis, part of which is caused by previously existing though latent disease.

The aortic valves were extremely red, though not otherwise diseased. The lining membrane of the aorta was of a most brilliant scarlet colour. Another point of interest in the case was, that the pericardium was universally obliterated by extremely old adhesions.

The Society was aware that Dr. Hope had laid great stress upon the occurrence of obliteration of the pericardium, as the source of



disease of the heart. He says he has never found obliterated pericardium without hypertrophy of the heart. The experience of the Dublin School was not in accordance with this statement, and Professor R. W. Smith has found obliteration of the pericardium as frequently in connexion with atrophy as with hypertrophy of the organ. Dr. Hope's reasoning was, that whenever the muscular forces had to overcome a difficulty, increased action and hypertrophy follow. Dr. Stokes was of opinion that no analogy existed between the impediment to muscular action in adherent pericardium and in valvular obstruction; in the first case the muscle is probably prevented from acting; in the second it is free to act, and it is precisely in the condition of one of the voluntary muscles, the force of which has been developed by muscular exercise; but where its action has been interfered with by the obliteration of the pericardium, then it is under different circumstances, and he thought that this condition was one much more likely to cause atrophy than hypertrophy. It is known, for instance, that in ulceration of the leg, where the tendons are matted together, and become adherent to the bone, atrophy follows the obstruction to muscular action; for in this case the muscles are not free to act. If the investigation were to be pursued further, and an examination made as to the general effect of the obliteration of the serous membranes on the organs which they cover, Dr. Stokes thought atrophy would be found to occur much oftener than hypertrophy. Under all the circumstances, therefore, he thought it would be fair to conclude that obliteration of the pericardium had not that direct influence in producing hypertrophy that Dr. Hope had thought, and that, on the contrary, it is more likely to be followed by atrophy of the heart. In the cases of combination of obliteration with hypertrophy the cause of the latter condition must be sought for.—*December 7, 1850.*

*Pericarditis.*—Dr. Corrigan having exhibited the specimen of the following case, said it was one which he wished to add to several cases of a similar nature, which had been supplied within the last two or three years. There was abundance of information possessed as to the early or first effects of inflammation on the membranes of the heart, whether external or internal. They had also a large amount of information as to the extent and nature of organic disease of that organ in its last stages, but they still were in need of accurate and extensive information as to the progress of disease from the time lymph was first deposited on the heart until it finally ended in organic disease.

The conclusions already arrived at on the subject were, he thought, singular, and also interesting to the practitioner, viz.:—that the lymph shed upon the heart, either upon the valves or the external membrane, remained longer (whether it was from the continued motion of the organ or not he could not say) in the transition state, or that state which formed the link between its first deposition and its organization, than in other organs or situations, and

thus permitted for a longer time the employment of those remedies which were calculated to promote absorption.

The case from which the present preparation was taken was that of a young girl, aged seventeen years, who was admitted into the Whitworth Hospital on the 6th September, and who died on the 10th of the same month. A month before her admission she had been subjected to exceedingly severe and harsh treatment from her parents, and had gone through great labour and fatigue, as well as much anxiety of mind. Dr. Corrigan had on several occasions seen pericarditis produced under similar circumstances of ill usage, particularly in children taken from charitable institutions, who had become servants, &c., and had more labour thrown upon them than they were able to go through. A month before her admission she was affected with severe palpitation, and a few days before admission a very severe attack of dysentery set in, for which complaint she was taken to hospital, and not for the attack of the heart. The history of the case during its progress it was not necessary to detail minutely. She died of the dysentery, and there was found extensive ulceration of the bowels. The circumstance of her death furnished an opportunity of observing the effects of the pericarditis, the first remarkable circumstance connected with which was the friction sound. In many cases of this disease the friction sound is so distinct that there is no possibility of mistaking it for any other; but every one who has had extensive opportunities for observation knows that sometimes there is a great difficulty experienced in determining between friction sound and bruit. He was frequently puzzled in endeavouring to distinguish one from the other. In this instance, that it was the friction sound was demonstrated by a simple experiment. When the patient lay upon her back, and when the stethoscope was applied over the lower part of the sternum, or the cartilages of the ribs in close connexion with it, the friction sound was clearly perceived; but when placed in a sitting posture, and made to lean forward, the sound disappeared: this at once showed that it was the friction sound, and not bruit de soufflet. The effect produced by change of position was as follows. There was a quantity of serous fluid effused into the pericardium. When the patient lay on her back, it gravitated, and the anterior surface of the ventricle, covered with lymph, came into contact with the opposing surface of the pericardium; but when she sat up and leaned forward, the fluid came forward and intervened between the heart and pericardium, and the friction sound disappeared. The means used in this case to determine between the two sounds will be sometimes found useful. On percussing over the region of the heart, there was found to be no increase of dulness, for the amount of the fluid was not sufficient to cause dulness. The patient suffered from palpitation and swelled ankles, which so often accompany this form of disease.

*Autopsy.*—On percussing the dead body, there was not found any increase of dulness over the region of the heart. The lungs



were sound, and a quantity of serous fluid, from about four to six ounces, was found in the pericardium. There were also found lying upon the surface of the heart flakes of lymph, like lymph which had been recently deposited, and on the anterior surface of the right ventricle there were two or three patches about the size of a shilling, or somewhat less, and which, in all probability, caused the friction sound.

Dr. Corrigan said the case gave some information as to the extent of time, namely, six weeks, counting from the week the patient first took ill, during which lymph can remain without being organized, and in a state capable of permitting absorption. The information afforded by it as the means of distinguishing between friction sound and bruit de soufflet, also induced him to bring the case before the Society.—*December 7, 1850.*

*Aneurism of the Thoracic Aorta.*—Dr. Lyons said he was enabled, through the kindness of Dr. Stokes, to lay before the Society a specimen of aneurism which presented some features of considerable interest. The case was an example of aneurism in which sudden death took place without rupture of the sac, and post mortem examination failed to show evidence of any lesion sufficient to account for the fatal result. It was much to be regretted that no history of the phenomena presented during life could be obtained, as the patient, whose name was Clarke, a man about fifty years of age, died on the evening of the day of his admission into the Meath Hospital. According to the report of the nurse, the manner of his death, with the exception of its suddenness, presented nothing marked or characteristic. Death had been known to ensue in cases of aneurism in some manner totally unconnected with rupture of the sac, and quite independent of other organic lesion, as in a case which he had published in the *Dublin Quarterly Journal of Medicine*<sup>a</sup>. In the case now under consideration, a large tumour, from three to four inches in diameter, was found, principally engaging the transverse portion of the arch of the aorta. The ascending portion of the vessel was considerably dilated, rugous, and covered with atheromatous deposit, and ossified plates, but the semilunar valves were healthy, and the heart of its natural volume. It was found very difficult to determine what particular coats of the vessel were engaged in the tumour, so much were its walls thickened and otherwise altered in appearance. Indeed on many occasions great difficulty will be experienced in deciding as to whether a particular aneurism be of the true or the false variety. He had on one occasion heretofore endeavoured to bring the microscope to bear on this question, by submitting a section of the wall of a tumour to a considerable magnifying power, and examining for the characteristic yellow elastic fibres of the middle coat; and though the observation made was not quite satisfactory, he felt sure that in many instances

<sup>a</sup> No. xviii. May, 1850.

where the arterial wall had not undergone too great an alteration in its tissues, this mode of examination would be found very useful. From many considerations he was induced to regard the particular tumour then before the Society as a combination of the true and the false forms, the greater portion of the wall of the sac retaining all the coats of the original artery, while the highest and most anterior part appeared, as it were, a false aneurism developed on a true, the curvature of the walls of both passing *gradually* into each other, and not *abruptly*, as frequently occurs in such cases. The tumour had made its way principally forwards and upwards, and had eroded the upper bone of the sternum, all intermediate structures being compressed, and particularly the left vena innominata, which had been obliterated to within an inch of its junction with the right, this latter vein having been thrown backwards and to the right side. The trachea, œsophagus, and other parts behind the tumour, did not appear to be in the least altered by pressure. A second aneurismal sac was found opposite the fourth dorsal vertebra, about the size of a hen's egg, and oval in figure; its walls were thin, and it contained little coagulum, unlike in this respect to the other, which contained firm laminated fibrine. The second tumour was most probably a false aneurism. The descending portion of the arch, and also the thoracic aorta, presented abundant patches of atheroma. The three trunks springing from the arch were very much displaced from their natural position, but, except at their immediate origin, were little changed in caliber. Here their orifices, especially that of the innominata, were flattened from before backwards, and subjected to traction in such a way that the posterior portion of the origin of the vessel was on a plane *much higher* than the anterior, and the whole tube was flattened from before backwards, a condition which must undoubtedly have influenced the current of blood passing through.

With regard to the question of the diagnosis of the true from the false variety of aneurism during life, considerable importance was given to it by the observations of Dr. Stokes, which went to show that life might be prolonged with a far less degree of suffering, and for a longer period of time, under the first condition, or that of *true* aneurism, than under the last; and hence, if any means of correctly establishing a diagnosis between the two varieties could be devised, it would be a most invaluable addition to medical knowledge. M. Gendrin had proposed as an element of diagnosis the absence of the second sound and second impulse in the true form of thoracic aneurism, stating at the same time that the double sound and double impulse *always* attended the false form. In his paper on "The Motions and Sounds of Aneurism," before referred to<sup>a</sup>, Dr. Lyons had endeavoured to prove the incorrectness of M. Gendrin's deductions, and to show that certain physical conditions of the sac, as to form, curvature of its walls, &c., in a thoracic aneurism, were more

<sup>a</sup> Dublin Quarterly Journal, *loc. cit.*



concerned in the production of the second sound and second impulse than the nature of the tumour, as to its being of the true or false variety; M. Gendrin's statement, that a double sound and impulse are to be observed in all abdominal aneurisms of the false form, being quite at variance with the observations of the Dublin School. With the exception, therefore, of the fact, in which M. Gendrin's experience quite concurred with that of Dr. Stokes, namely, that the true form of aneurism was accompanied by less suffering than the false, no means of diagnosis between the two varieties of this important lesion had as yet been discovered, and well kept records of the different physical and general phenomena presented by both during life were yet a great desideratum.—*December 14, 1850.*

*Calculi in the Kidney and Bladder.*—Mr. Hamilton showed a preparation in which there were calculi in the kidney, in the ureter, and also in the bladder. The patient was an old soldier aged 60, who had been wounded at Quatre Bras, by musket balls, through the arms, the thigh, and across the loins. The latter wound was, most probably, the exciting cause of that state of the kidney which led to the formation of stone. Mr. Hamilton some years since assisted Sir Philip Crampton in the operation of lithotomy on a colonel who in the forlorn hope at Badajoz had been shot across the loins, the musket ball having broken a spinous process of one of the lumbar vertebræ. Soon after symptoms of renal disease began, and ended in the formation of stone. The present patient, when admitted into the Richmond Hospital, in July last, presented the symptoms of stone in the bladder in a most aggravated form. He suffered great and constant pain at the end of the penis, which he was always pressing and pulling, to give him ease. The pain, and the incessant calls to pass water, nearly deprived him of any sleep at night. Each effort to pass water was attended with dreadful suffering and straining, the urine coming with difficulty, or drop by drop, and often suddenly stopping. The greatest pain occurred at the end, when a few drops of pure blood came away. The urine was alkaline, with deposit of pure pus, and after standing some time there was a thick, ropy, mucous deposit adherent to the vessel. He could retain the urine a very short time, and could not bear the injection of more than three ounces of tepid water. A rough and large stone was at once recognised by the sound, and when it was caught by the lithotrity instrument, it proved to be about two inches in diameter, most probably, supposing the stone to be oval, its shortest measurement.

From his age, his wretched, broken-down constitution, the frequent rigors, the tendency to vomiting, and the state of the urine, lithotomy was out of the question; the intensely inflamed, irritable, and contracted bladder, with the large size of the stone, equally forbade lithotrity. Mr. Hamilton, therefore, declined, at first, any operative proceeding; but the patient's entreaties for relief

were so urgent, that he reluctantly proceeded to attempt to break the stone in the bladder, hoping to accomplish this to such an extent in two operations as to be able to extract the fragments by lithectomy;—that is, an incision in the membraneous portion of the urethra, subsequently dilated sufficiently to admit the introduction of a small forceps into the bladder, and the abstraction of such portions of the calculus as should be too large to pass by the urethra, and whose minute fracture would require the operation of lithotripsy to be too frequently performed for the strength of such a patient to bear.

The first operation was not difficult; the stone was readily caught and broken: the two subsequent ones were very difficult, from the great irritability of the bladder, and its contracted state, impeding almost entirely the proper manipulation of the instrument. The operations were followed by the passage of fragments of different sizes, making altogether the bulk of a chesnut. Two of them stuck in the urethra, and had to be cut out anterior to the scrotum; others were drawn out by Leroy's instrument, invented for this purpose. Altogether, the result of the operation, though not satisfactory, was not unfavourable. The patient's sufferings were lessened, and his constitution rather improved. At this time Mr. Hamilton went to Paris, and ten days after he left, the patient was seized with uncontrollable diarrhoea, and rapidly sank under it. Professor R. W. Smith kindly made the post mortem examination, and preserved the parts for him.

The bladder exhibited at once the impossibility of properly performing lithotripsy in this case; it was so contracted as barely to admit three ounces of water; its walls were thickened, and its mucous membrane was of a plum colour, with deposition of grey lymph, showing the intensity of the inflammation. It contained, first, a large portion (the half) of a calculus, about the size of a walnut, and three fragments, a little less than a hazel nut each: the smaller portions had all been passed through the urethra. The centre nucleus was lithic acid, with a thick outer layer of the triple phosphate. The right ureter, as it ascends from the bladder, was thickened and contracted, till it approached quite close to the kidney, where it was dilated by the presence of a calculus a little smaller than a marble. In the kidney were four calculi, one large and irregular, with branches from the pelvis into the infundibula, which firmly fixed it in its position. The three others were loose in the pelvis. The other kidney was enlarged, and looked red and inflamed, but contained no stone.

It was therefore quite clear that no operation could have been of any avail in this case. It was a most interesting fact that there was no symptom during life which could lead to the diagnosis of the calculi in the kidney; no pain in the loins or down the ureter. It was, however, likely that the attacks of obstinate vomiting might be attributable to their existence.—*December 14, 1850.*



*Fracture of the lower end of the Fibula, with Displacement of the Tibia inwards and forwards.*—Professor R. W. Smith exhibited two casts, showing the appearances of the limb before and after the operation, which was performed to remedy the deformity arising from the above-mentioned accident, and gave the following history of the case.

James Fawcett, aged 23, was admitted into the Richmond Hospital upon the 22nd of March, 1850. He stated that, ten weeks previously, when alighting from a car, his right foot was violently twisted outwards; that he at once fell to the ground, and was rendered incapable of walking. Upon the day following the accident (which occurred in Dungannon) he placed himself under the care of a local practitioner, who told him that the ankle was dislocated; he extended the limb, and placed a roller upon it. The patient remained under this gentleman's care for eight weeks; but during this period nothing was done, except bandaging the limb; no splints were at any time applied. When he was admitted into the Richmond Hospital, March 22nd, the limb exhibited the following appearances: the external supra-malleolar region presented a remarkable curve, the concavity of which was directed outwards; the internal malleolus projected inwards considerably, and the lower end of the tibia was also thrown forwards; the foot, besides being twisted outwards, was also extended on the leg, the heel elevated, and the tendo Achillis curved, the concavity being directed backwards. When the man endeavoured to bear his weight upon the injured limb, the foot became still further twisted outwards, and its external border elevated: he could not attempt to walk without the aid of a stick, nor could he place the sole of the foot flat upon the ground: when he threw the weight of his body entirely upon the affected limb, the inner ankle appeared as if about to burst through the integuments: the upper end of the lower fragment of the fibula was drawn forwards, and had sunk in towards the tibia; the skin covering the inner malleolus had been abraded at the time of the occurrence of the accident, and an ulcer still remained in this situation.

The man (in consequence of the displacement having been left unreduced) being incapacitated from following his occupation (that of a horse-shoer), and the fracture of the fibula having become so firmly united as to render it evident that no apparatus would be adequate to restore the foot to its normal bearings with the leg, it became a question for consideration whether any operation could be performed calculated to accomplish this object, or at all events to enable the patient to place the sole of the foot flat upon the ground. Professor Smith therefore suggested to his colleagues the propriety of sawing the fibula across, at the seat of the now united fracture, and of dividing the tendo Achillis, as had been recommended to him by Dr. Hutton. This proposal having been acceded to, the operation was performed. The fibula having been exposed by an adequate incision,

and the soft parts protected by a broad spatula, the bone was sawn more than half through, and its division completed with a strong cutting forceps; the tendo Achillis was next divided in the usual manner. At 4 o'clock, P.M., the hemorrhage, which had not ceased since 10 A.M., when the operation was performed, obliged him to dress the wound from the bottom with lint soaked in turpentine. A moderate degree of fever followed, which, however, subsided after a few days, and the wound began to suppurate so freely, as to require dressing twice daily. At the end of a fortnight the limb was enclosed in an apparatus, one portion of which consisted of the side splint and cushion employed by Dupuytren in cases of Pott's fracture, by means of which the foot was gradually brought into a state of complete adduction; a second part of the apparatus was composed of a splint placed on the back of the leg, and having a foot-piece fitted to it at a right angle. A compress was placed on the front of the lower end of the tibia, and secured by a roller carried round the posterior splint, so as to press the bone backwards.

A considerable degree of embarrassment and delay occurred during the progress of the case, from the presence of the small ulcer over the inner malleolus, and also in consequence of the heel becoming blistered, although both parts were, as far as possible, protected from the effects of pressure, by circular pads.

The man remained in the hospital for a long time, but Professor Smith remarked that it was unnecessary to detain the Society by giving a detailed account of the progress of the case; and at the expiration of about five months the patient left the hospital, able to walk without a stick, and to place the sole of the foot flat upon the ground. The foot remained at a right angle with the leg, but the projection of the tibia inwards and forwards still existed, although in a much less degree than before the operation was performed; and he felt sure that had the state of the inner ankle and of the heel permitted him to continue the necessary amount of pressure, the perpendicular bearing of the tibia upon the astragalus would have been restored<sup>a</sup>.—*December 7, 1850.*

<sup>a</sup> For an account of division of the tendo Achillis in certain cases of fracture of the bones of the leg, Professor Smith referred the Society to the *Gazette Médicale* for 1840; and also to the thirty-third volume of the *Medico-Chirurgical Transactions*.



## REPORT

ON THE PATHOLOGICAL MUSEUM OF THE BELFAST MEDICAL SOCIETY.

BY A. G. MALCOLM, M. D.,

ONE OF THE VICE-PRESIDENTS OF THE SOCIETY.

IN the present paper, it is my intention to commence a series of Pathological Reports, by giving a general description of the extent and character of the Pathological Museum in the possession of the Belfast Medical Society. The origin of the Museum dates as far back as October, 1845, when the report of a committee appointed to arrange a plan for its formation was adopted, and its establishment forthwith commenced, under the directions of a joint committee, called "the Library and Museum Committee"<sup>a</sup>. Prior to the past year (1850), the number of specimens, collected by the contributions chiefly of the medical staff of the hospital, did not exceed fifty. Lately, however, a favourable opportunity presented itself for enlarging the collection to an extent worthy of the name. A large selection, from the museum of Mr. (late Professor) Lizars, of Edinburgh, having been forwarded to Belfast for disposal, fifty-six specimens were selected and purchased by the Society, and 198 others have been presented as a donation to the Society by Dr. Robert Bryce, who fortunately became their possessor.

The Pathological Museum, therefore, consists now of 304 different illustrations of disease, of which 205 are specimens preserved in spirit and in the dried state, and 99 oil paintings and engravings.

In giving an idea of these different specimens, I do not mean to describe each separately, as this course, however interesting to some, would be necessarily tedious, and assume too much the form of a catalogue to be of any utility. I purpose to present merely the statistical result of an analysis of the entire collection, dividing the preparations into classes of which I shall state the number, and the particular forms of disease which they illustrate, adding any peculiar facts which they may exhibit; and, having thus given a general review of what the Museum contains, I will close the present communication by referring briefly to the advantages which the collection of pathological records supplies, both to the pathological inquirer and to the practitioner.

The Museum may be conveniently considered under two great divisions: first, all those specimens of disease or altered structure which engage the body generally, or several portions of it; and, secondly, those which specially affect individual organs.

In the first we shall place all the illustrations of injuries, of tu-

<sup>a</sup> Since dissolved, and replaced by the appointment of "the Council."

mours, of diseases of the bones, the joints, the blood-vessels, the nerves, and the skin, and of malformations. In the second those of diseases of the brain, of the eye, of the chest, of the abdomen, and of the pelvis.

I. INJURIES.—Of injuries we have thirty-six illustrations. There are eighteen examples of *fracture*, three of which penetrate joints. All but two were compound, several comminuted, and most required amputation; four instances of *dislocation*, three of these compound. In one of them (Preparation 92), compound luxation of the ankle-joint occurred in a sailor, aged 20; a portion of the astragalus was excised, and the case did well. In another (Prep. 107), there was a similar injury, which occurred in a man aged twenty-two years, in which the distal ends of the tibia and fibula, with half of the astragalus, were removed by operation,—in other words, excision of the ankle-joint was performed,—and recovery followed, with a useful joint. Of the compound fractures, one (Prep. 93) required amputation, on account of the formation of a false joint. In another (Prep. 96), the fracture penetrated the elbow-joint, with laceration of the soft parts up to the shoulder. Amputation at the latter joint was performed by Professor Lizars with success. In (Preparation 97), gangrene and death followed a complicated fracture into the ankle-joint.

Of *Gunshot Wounds* we have five illustrations. One of these (Prep. 87) is interesting from the circumstance, that the bullet was firmly encased in the tibia, and, when extracted, was as *round* as when fired from the musket. Another (Prep. 88) shows the usual flattened condition which the bullet assumes after striking the bone.

Of *Injury of Internal Organs* we have two examples: one (Prep. 26), rupture of the superior longitudinal sinus in a child aged five years; and the other (Prep. 99), the transfixing of the rectum, bladder, and peritoneum, by a flat iron rod upwards of two feet in length. In the latter, death of course followed, preceded by peritonitis.

Of cases of *foreign bodies* in the larynx and pharynx we have four interesting examples: one (Prep. 94), representing a mutton bone found imbedded in a sloughing abscess in the posterior wall of the pharynx, which was not detected during life; another (Prep. 100), in which death by suffocation occurred from a piece of carrot having dropped into the larynx; and a third (Prep. 91), the cast of a plug of cotton, by means of which suicide was effected. In Prep. 32 we have an instance of the effects of homicide, in which the carotid artery, jugular vein, and pneumogastric nerve were divided. Besides these, we have (in Drawing 39) the case of a boy whose entire arm was torn off by machinery, and who nevertheless recovered; and in Prep. 95 we have a rare specimen of a portion of an amputation knife broken off by an hospital surgeon while in the act of transfixing the limb.

It is always interesting to notice the efforts of nature in the repair of injuries, for by this observation we arrive at a knowledge of what will probably be the result in any given instance. A frac-



tured bone does not always heal by osseous union, either on account of the vascular nature of the part involved, or on account of some defect in the management. Thus in Prep. 106 we have a fractured clavicle united by ligament or by fibrous tissue; and in Prep. 102 we have a fractured olecranon, in which no ossific union had taken place. On the other hand in Prep. 174 we have a beautiful example of the repair of fractured frontal bone; and in Prep. 164 we have an assumed instance of bony union within the capsule, after fracture of the neck of the femur. I say *assumed*, for ligamentous union is the rule, as may be readily proved by a reference to published cases. Thus, of ten cases of fracture of the neck of the thigh bone within the capsular ligament, published by Mr. Langstaff, in the thirteenth volume of the Transactions of the Royal Medico-Chirurgical Society, in nine there was union by ligament, and in one only by bone; and in eight other cases published in his catalogue, four were united by ligament, two partly by bone and partly by ligament, and in the two others no union at all had taken place; so that the instance referred to here of apparent ossific union must be considered doubtful.

II. TUMOURS.—Of these we have thirty-four specimens, sixteen malignant, of which four exhibit the *scirrhus* form of cancer, and twelve the *medullary*. We have scirrhus of the rectum (Prep. 125), in which recovery followed removal; of the glands of the neck; of the tongue; and a rare instance (in Drawing 55) of the breast of a male. The *medullary* cancer we observe in the neck, the palate, the antrum, the intercostal muscles, the knee-joint, the hip-joint, and the testes. In Prep. 124, the tumour which occupies the antrum maxillare of a woman, aged forty-five years, was removed by operation, and recovery followed. Of the eighteen *benignant* tumours, we have examples of most of the forms. Thus, we have four cartilaginous, four of osteosarcoma, two encysted, two fatty, one cystic, one fibrous, one vascular, one of inflammatory hypertrophy, and one (Drawing 44), in which instance a chronic abscess was mistaken for aneurism of the carotid artery.

We have thus a fair average collection of the different varieties of tumours; and, when we consider the difficulties of diagnosis which beset our examinations in the living subject, we must see the importance of the advantage which the study of a large collection must supply to the practitioner, as it is only by a careful comparison of the symptoms and appearances, and the actual indications of a large number of tumours, aided by the use of microscopic investigation, that we can ever arrive at accuracy in diagnosing tumours as they appear to us in actual practice. But, to render this collection valuable to its utmost extent, it would be necessary to be supplied, not merely with the actual tumour and a record of the symptoms, but also with a sketch of it as it actually existed *in situ* during life, and a knowledge of the history of the case from its very commencement.

III. DISEASES OF THE BONES.—Of these we have thirty-one spe-

cimens: three of simple inflammation, in which the bone is hypertrophied and roughened; six of caries, two of abscess, three of exfoliation, three of necrosis, nine of exostosis, and four of alterations or abnormal changes, not precisely morbid,—such as extraordinary prominence and depression of parts of the skull. Of these specimens, one of the most interesting is Prep. 199, in which we have the entire clavicle, that had undergone necrosis, in a boy aged 6, and was removed by operation, with complete recovery; and another (Prep. 171), consisting of extensive exostosis of the bones of the leg and tarsus, with remarkable bony union, to a considerable extent, of the tibia and fibula.

IV. AFFECTIONS OF THE JOINTS.—Of these we have nineteen examples: two instances of erysipelas of joints; one in a case of necrosis of the contiguous bone, and another terminating in ankylosis; one of disease of the synovial membrane, which is studded with tubercles; one with millet-seed cartilages, which were removed from a large bursa at the wrist-joint; four cases of ulcerations of the cartilages, in one of which excision of the elbow-joint was performed with success; one of disease of the hip in its most advanced stage; five examples of the porcelainous deposit; and five of ankylosis, two of which are in the incipient state.

V. DISEASES OF THE SPINE.—Of these we have nine specimens, seven representing the different forms of curvature; one of these (Prep. 58) with complete ankylosis of the twelve dorsal vertebræ, and one (Prep. 65) with complete destruction of the eighth and ninth dorsal vertebræ. Preparation 61 shows disease of the atlas and dentata, with absorption of the transverse ligament; and Drawing 76 exhibits lumbar abscess, which, as Sir B. Brodie has shown, is almost always associated with caries of the vertebræ as its cause.

VI. MALFORMATIONS.—Of these we have twelve specimens: three of rickets, one of club-foot, one of encephalocele of the posterior lobes of the brain, one of congenital hernia, one of hare-lip, with fissured palate, two of malformations of the genital organs of the male, and one, a rare instance, of ligamentous fibula (Prep. 163); and (Prep. 15) a unique specimen showing the vena azygos situated on the right side of the aorta, and receiving the blood of the lower extremities, while the vena cava receives that of the portal system only.

VII. DISEASES OF THE BLOOD-VESSELS.—Of this class we have eight illustrations: two representing the calcareous deposits and changes which occur in the coats of the aorta in advanced years; and six representing the pathology of aneurism; one of which (Prep. 128), is a beautiful specimen of aneurism of the ascending aorta. Drawings 19 and 41 represent Mr. Wardrop's celebrated case of aneurism of the arteria innominata, in the person of Mrs. Denmark, in which the operation of tying the carotid was performed without success.

VIII. NERVES.—Of diseases of the nerves we have only one specimen (Prep. 34), a tumour of the median nerve.

IX. SKIN.—There are eight examples of diseases of the skin:



one, erythema of the leg; one, inflammation of the lymphatics; one, erysipelas; one, phagedenic ulceration; one, gangrene; one, impetigo; and two, lupus.

## PARTICULAR ORGANS.

I. THE BRAIN.—We now come to examples of the diseases peculiar to individual organs; and, first, we shall take THE BRAIN and its membranes. Among these, we have some very interesting specimens. Thus, Prep. 207 is an excellent example of recent apoplexy, a very large clot being well observed in the corpus striatum and in the lateral ventricle. Preparation 27 gives us an instance of recovery from an attack of apoplexy, the clot having been converted into a cyst, which may be seen situated on the left side of the cerebellum. Palsy of the *same* side had occurred in this case. In Prep. 30 we have ulceration of the dura mater, the result of injury by a trephine in the hands of an hospital surgeon.

The other specimens represent chronic disease (as in Prep. 28), scrofulous tubercles in the case of a child, aged 3; in Prep. 208, softening of the brain, of the sanguineous form; and in Prep. 35, an instance of a tumour attached to the mesocephalon or pons Varolii. The patient in this case died of epilepsy.

II. THE EYE.—Our Museum is rich in illustrations of diseases of the eye. Of these we have thirty-five: five of diseases of the conjunctiva, embracing purulent ophthalmia, pterygium, and tumour; two of diseases of the eye-lid; eleven of affections of the cornea, comprising opacities, ulcerations, tumours, and the effects of lime; one of inflammation of the aqueous humour; ten of affections of the iris, including lacerations, inflammation, adhesion, and artificial pupil; one of glaucoma; two of true cataract; one, wound of the capsule; one of fistula lachrymalis; and one of tumour of the orbit.

III. THE MOUTH.—Of affections of the mouth we have only three specimens; one being the capsule of a ranula; a second representing a large vascular tumour of the tongue; and the third being a calculus removed from the parotid duct.

IV. THE LARYNX.—Of the affections of the larynx, we have three specimens: two representing œdema, and one ulceration; besides an example of cirrhosis of the thyroid body.

V. THE LUNGS.—There are twelve specimens of diseases of the lungs: five of pneumonia in different stages; four of pleurisy, recent and old, with and without adhesions; three, phthisis in the last stage; and one, an instance of pneumothorax, arising from the bursting of a tubercular cavity into the pleura. Among the pleuritic specimens, there is one (Prep. 48) of empyema, which occurred in a child aged 4, interesting from the efforts of nature towards relief by perforation of the intercostal spaces at three points, one as high up as the *third* space. An apparent abscess presented itself immediately above the nipple. The lung was condensed and atrophied to an extraordinary degree.

VI. THE HEART.—Of heart diseases we have six examples: four representing acute pericarditis; one, chronic ditto, with hypertrophy; and another representing disease of the aortic valves, with extraordinary dilatation of the left ventricle. In this latter case, gangrene of one foot had set in a short time before death.

VII. THE STOMACH.—We have only three examples of diseased stomach: one, a very interesting instance of the recent effects of arsenic; the second, of scirrhus of the pylorus; in this case there was also the same disease, with stricture in the colon: and the third exhibits adhesion of the stomach to the transverse arch of the colon, and ulcerative communication between the two cavities.

VIII. THE INTESTINES.—There are eight specimens of diseased intestines: one, of acute peritonitis; one, of intussusception, which occurred in an infant; four examples of ulceration, one occurring after strangulated hernia; another associated with diseased mesenteric glands highly charged with scrofulous deposit; a third occurred in connexion with an enormously distended colon, which, simulating ascites, was tapped six months before death; and the fourth case represents an ulcer of the ileum cicatrized. The remaining two represent dissections of hernia; one, of the neck of the hernial sac, and the other (Prep. 77) is a valuable dissection of inguinal hernia, prepared personally by Sir Astley Cooper, and intended by him to illustrate the anatomy and importance of the *fascia transversalis* in Lizars' Anatomical Plates, in which may be seen two drawings of the preparation.

IX. THE LIVER.—There are seven specimens of hepatic disease: two of the gall-bladder, and five of the liver itself. In one of the former, the coats are excessively thickened, and surrounded with extensive cartilaginous deposit, in connexion with cysts containing gall-stones, and adherent to the colon. This case was interesting from the fact, that the symptoms during life simulated very closely disease of the stomach; which, however, was found after death to be in a normal state; and, in the other case, the bladder was distended with gall-stones, some of which occupied the duct. Of the diseases of the substance of the liver, we have three specimens of inflammation, one of acute hypertrophy, and two of chronic induration; besides which there are two examples of cirrhosis, which in one supervened after jaundice, and in the other was associated with granular kidneys and psoas abscess.

X. THE SPLEEN.—We have but one instance of diseased spleen, in which the peritoneal coat is alone affected, being in a cartilaginous state.

XI. THE KIDNEY.—There are three specimens of diseased kidneys: one containing a large cyst; a second, an example of Bright's disease; and the third, inflammation of the pelvis, which was connected with stricture of the urethra and inflamed bladder. There are three urinary calculi, one of great size, fully as large as an ordinary hen-egg.

XII. GENITAL ORGANS.—Of diseases of these organs we have



eleven specimens, six of which occurred in the male, and five in the female. Of the former, we have two instances of scrofulous testis, one of hydrocele, one of hematocele, one of circocoele, and one of paraphymosis. Of the latter, we have two tumours of the labium, one of the cervix uteri, and one of scirrhous of the uterus. In connexion with these genital diseases, we may conveniently arrange the instances of

XIII. SYPHILITIC DISEASE.—Of it there are eight specimens: six of these are diseased bones, such as caries and necrosis of the cranium, destruction of the palate and nasal bones, exostosis of the femur, tibia, and fibula, and (Prep. 59) a very important specimen, representing caries of the atlas and dentata, with destruction of the sheath of the spinal cord, which in this case caused death. The two remaining cases exhibit a testis inflamed during gonorrhœa, and a penis destroyed by ulceration.

Besides the above, there are thirty drawings exemplifying the different operations of lithotomy, lithotripsy, amputation, and those for strangulated hernia and aneurism. There are also nine drawings descriptive of the normal anatomy of the arteries, and of the region of the neck.

In reference to the advantages attendant upon a pathological museum, a few words may suffice. First, there can be no doubt upon the mind of any person, that, as subjects of study and reference in his inquiries, the specimens of morbid anatomy collected in a large museum are invaluable to the pathologist. He whose object is to search among the traces of its progress which disease leaves in the human frame, with a view to arrive at a knowledge of morbid phenomena, the sequence in which they occur, and, if possible, the laws by which they are regulated, can derive, by the aid of the scalpel, the microscope, and test-tube, the only real data for his researches. Let us illustrate this by a reference to the manner in which we might suppose he would enter upon his inquiries into the pathology of an epidemic dysentery. Numerous cases are recorded, presenting closely similar phenomena, and a similar order. He examines the intestines in the fatal cases; he notes the changes from health which are to be found in the mucous membrane and the other coats; he observes what portion of the intestine is uniformly more or less affected; he examines, chemically and microscopically, the fluids which sheathe the surface, to ascertain their composition; and, after an extended observation, should he find invariably present a certain change of structure and a certain change of secretion, associated with a certain series and order of symptoms, then he has a Baconian right to infer that he has discerned the morbid anatomy of a certain form of epidemia. In this manner, and not by concocting theories at the desk,—in this manner, and this *alone*,—can any real advances, deserving the name of science, be attained in medicine. Yet, although the study of morbid anatomy, and, accordingly, a constant reference to the contents of a museum, may be admitted as indispensable to the pathological inquirer, still it may be

asked, "Of what use is a pathological museum to the busy practitioner, whose time is swallowed up by the routine of his profession?" This is taking an extreme case: to such even books can be of little service, because little consulted. There are none among us so busy as to be bereft of all opportunity for study, by which we can in some degree keep pace with the mighty strides which the science of medicine is yearly making. Let us then not consult books alone, which give us merely the thoughts and opinions of other men, and the faint records of the past; but let us consult as well the authority of *nature*, who provides, in the relics of humanity, an endless series of proofs of the laws which govern disease.

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### MEDICAL MISCELLANY.

*Postscript to DR. GRAVES' Paper on Cholera, Published in the Number of this Journal for November, 1850.*

THE progress of cholera since I last wrote upon the subject furnishes, in my opinion, facts of great importance, affording additional proofs of its contagious nature. On a former occasion I ventured to predict that the rapidity of communication between distant countries, the consequence of steam navigation, would, in all probability, greatly facilitate the migration of cholera. This prediction has been verified, and many parts of the world so distant from the nearest infected ports that the duration of the voyage by sailing vessels afforded full time for the cessation of infection, and thus formed a full and effective quarantine for their protection,—these very parts have now suffered in consequence of the introduction of steam navigation, which so abridged the time occupied in the passage, that it no longer formed a sufficient safeguard. For this reason cholera has now visited the West Indies, where the following account shows that it has raged with unusual severity:

"The cholera in Jamaica has been the most frightful scourge that has afflicted for many years any country in the western world. The tropical climate of Jamaica, the filthy and indolent habits, and the ignorance and superstition of its coloured population, the general poverty, and the unprepared state of the inhabitants for the visitation of a plague, have been the causes which have made one of the most beautiful islands in the Caribbean Sea a scene of unutterable woe and desolation. On the 7th of October last Mr. Watson, the surgeon of the naval hospital in Port Royal, announced that Asiatic cholera of a malignant type had made its appearance in that town. Immediately after that, on the recommendation of Dr. Beveridge, the surgeon of Her Majesty's ship *Imaum*, the Commodore of the British fleet ordered all leave to go on shore to be stopped,



both for seamen and officers; fish and fruit were forbidden to be tasted on board ship, and every man was examined to see that he wore flannel next his skin. To these precautions may be attributed the comparatively healthy state of the crews during the terrible mortality on shore. When Mr. Watson first announced the existence of Asiatic cholera in Jamaica, the inhabitants were incredulous. Facts soon convinced them, however, of its truth, and at the urgent request of Mr. Watson plans were devised to stay the plague. A cholera hospital was established, and some of the surgeons of the fleet were sent ashore to assist. Government medical stores were distributed freely, but it was soon found that both the quantity of medical stores and the number of medical men were totally inadequate to the frightful extent of illness and suffering that prevailed. It is known that upwards of 5000 persons have died in Kingston and Spanish Town alone; but it is impossible to state how many have actually died. Numbers were so panic-stricken, that they would not apply for assistance, and no one knows that they have been ill and died. Some were found dead in cellars, where they had been lying dead for days. The muscular movement of the body after death, in cases of malignant cholera, has been the cause of the utmost alarm amongst the inhabitants, and contributed to their panic-stricken state. They refused to bury the dead, for fear of burying them alive.

“ One of the most distressing things in Jamaica is the number of orphans, both black and white children; and their condition and future provision are now occupying the serious attention of the Jamaica authorities. Hundreds of children of tender age are left utterly destitute; for fathers, mothers, brothers, and sisters have been swept away by the pestilence. They are to be seen in houses, forlorn and helpless. Infants are found lying on the floor, forsaken by friends and relatives, for they are sleeping in death, and these innocents are kept from perishing by the visits of the benevolent. In the cholera hospital a gentleman saw an infant a few months old, whose mother had died there, kept alive by an aged black man; he fed the infant daily with milk sent for that purpose by some benevolent clergyman. The panic-stricken state of the poorer inhabitants is truly marvellous. A medical man dragged out a poor afflicted creature from a most filthy hole, where he was on his knees praying to God to spare his life. The same gentleman saw seven poor frightened creatures rubbing with turpentine five others in the last stage of cholera. Nearly the whole of these persons were corpses in a few hours afterwards.

“ Although there are many rich individuals in Jamaica, yet, generally speaking, there is not wealth enough to pay for the expense attending this dreadful and wide-spread calamity. One day upwards of £1600 was subscribed for medical assistance and relief, but this was nothing, as it were, compared with what was required. Mr. Nethersole, a magistrate, entreated Mr. Currie, the agent of the Royal Mail Steam Packet Company at Jamaica, to let the mail steamer go to Porto Rico or St. Thomas for drugs, and he became answerable

for the expense of obtaining 50lbs. of opium and 50lbs. of calomel. Mr. Currie went himself in the steamer to obtain the requisite drugs. This was about the latter end of the last month.

“The dread of cholera in Jamaica seems to have destroyed all the social affections. Some of the poor blacks have been found to place their dead relatives before the doors of their neighbours, to avoid the infection, or because they were unable to pay the expenses of burial. It was urgently suggested that trenches should be dug, and that corpses should be buried without coffins, in order that the expense of the latter should be saved, and go towards providing an orphan fund.

“On the 16th ult., the day after our latest advices left Jamaica, *via* America, the Jamaica journals indignantly complained of the unwillingness of persons to assist others who were attacked with cholera, and made the most piteous appeals to the humanity of the former to be kind and humane to their suffering fellow-creatures. The Kingston journals, also, of that date, recommended large fires to be lit, and kept constantly alive, in the centre of the town and in the burial grounds, to drive away the pestilence.

“LATER FROM JAMAICA.

“We have received by the Europa intelligence from Jamaica to the 1st November.

“We regret to learn that the cholera continues to make the most fearful ravages throughout the British West Indies. It has been very fatal at Kingston, Jamaica, but is now more severe in other parts of the island. Kingston is reported to have lost 5000 by that disease (six or seven of the ablest physicians in the town have fallen victims), and a proportionate number at Port Royal; it has entirely disappeared from the latter place. The most melancholy accounts are received from the agricultural districts. The *Journal* says that in Plain Garden River district 1000 persons have been swept away by the fell destroyer. It states that—

““From St. David frightful accounts have been brought to town. Not only have the great mass of the population between the Eleven Mile Tavern and Yallah’s, and a large number of the inhabitants in and around Elsington, been swept away, but it is said that the whole police force, sergeants, corporals, and privates, have been immolated, the whole force dying, as it is said, under literal want of sustenance, in consequence of the non-payment of their pay. The statement has been made for some days in the columns of a contemporary, and has not been denied. It is, impossible, however, that such a charge can long escape inquiry. The money, we have reason to believe, was forwarded from Kingston, and some one must be responsible for its non-distribution. It is a thing too frightful to contemplate, that an entire detachment of police should have been left to die of cholera, without even the comforts derived from their hard-earned pay.

““In the mountain districts of the same parish the cholera is



said to be equally destructive. It has appeared at Radnor, a property upwards of 3000 feet above the level of the sea, and the finest climate known, and it has touched similar altitudes in the parishes of Port Royal and St. Andrew. It has been frightfully malignant at Middleton coffee plantation, the property of the Duke of Buckingham, and it has manifested itself at Charlottenburgh, Chester Vale, Newton, and other properties, all situate at an altitude that has hitherto defied febrile diseases.'

"Another account states that, 'When any one of them is attacked with the disease, he or she is at once forsaken by father, mother, brothers, sisters, and left to the white people to attend to them as they best can. One unnatural mother, when an infant three years old was attacked and carried to the hospital, having been requested by the manager to go and attend to her child, replied coolly that the child might die, but she was not going to risk her life for the sake of a child. The result has been that she was last night herself attacked, and died at 4 in the morning, and the child is recovering in the hospital. Indeed, unless you were on the spot, you could hardly conceive the want of feeling displayed by the people towards each other. I have been compelled to pay five shillings before they would strike a hoe to inter the dead. I am sorry to say the disease has broken out afresh at Winchester, and I hear of thirteen deaths at Bath, several at Holland and Duckenfield, as also at Stokes Hall, Hampton Court, Pleasant Hill, and Phillipsfield.'"

In the preceding statement some facts are mentioned which deserve especial notice. First, in Jamaica, as elsewhere, cholera made its first appearance in the ports, and among the portion of the inhabitants which has most intercourse with the shipping. Secondly, it spread with great rapidity amidst the dense population of the town. Thirdly, it is particularly to be remarked as being directly opposed to the miasmatic hypothesis, that the cholera reached Radnor, 3000 feet above the level of the sea, and the finest climate known, and touched similar altitudes in the parishes of Port Royal and St. Andrew. Fourthly, it manifested itself at Chester Vale, Newton, and other properties, all situated at an altitude *that has hitherto defied febrile diseases*. This last circumstance is of great importance, and becomes more significant when we bear in mind that the febrile diseases here alluded to are remittent, and also yellow fever, which in Jamaica confessedly arise *from miasmatic influences*. Fifthly, I have to add that it appears from other accounts that the pernicious habit of waking their deceased relations was persevered in by the coloured population of Jamaica throughout this epidemic, and must have contributed materially to the diffusion of the disease.

In conclusion, it can scarcely have escaped the observation of my readers, that San Francisco, the sea-port of California, was infected from the Republic of Mexico by means of an American ship. In this case the disease had travelled, first, southward from the United States, then eastward across the mountains of Mexico, and lastly, northward by sea to California.

R. J. GRAVES.

December 30, 1850.

*Case of Erysipelatous Laryngitis, in which Tracheotomy was performed.*

By JOSIAH SMYLY, A. B., Surgeon to the Meath Hospital and County of Dublin Infirmary, &c.

WHEN erysipelas attacks the throat and spreads to the larynx, it causes œdema of the glottis, closing the rima, and suffocation must be the result, unless an opening be made in the trachea for the admission of air into the lungs.

Tracheotomy, as warranted in such circumstances, is spoken of by authors in terms so discouraging as to deter the surgeon from the performance of it; and my object in narrating the following case is, to show that erysipelalous laryngitis is not so hopeless as we are taught to consider it, and that, even under unpromising circumstances, a happy result may be obtained by having recourse to this operation.

Professor Porter, in his admirable "Observations on the Surgical Pathology of the Larynx and Trachea," at page 95 of the second edition, remarks as follows:—"It occasionally happens that erysipelalous inflammation attacks the larynx and trachea, and produces symptoms of dyspnœa of a singularly formidable character. In the winter of 1835-36, erysipelas prevailed to a very considerable extent in the Dublin hospitals, and many examples occurred of its seizing on the throat, either by apparently spreading to it from the head and face, or by some species of metastasis, the disease subsiding externally on its engaging the internal structures. Amongst all these cases I have not heard of a single recovery; neither do I suppose such to be possible, considering the low and typhoid character of the fever. In most of these, the submucous cellular tissue was found extensively infiltrated with putrid matter. I am not at this moment aware that bronchotomy was performed on any of these patients, although I knew it was proposed with reference to three; and, if it had been, I cannot by any means imagine it could have been attended with success."

Again, at page 97, he says:—"In the absence of evidence of incurable disease, the surgeon is right who seeks to relieve the prominent and distressing symptoms of difficult respiration. He fails, certainly, but he does so with the consolation of having performed his duty to the utmost of his ability."

Mr. F. Ryland, of Birmingham, writing in 1837, illustrates the pathology of erysipelalous laryngitis by seven cases; with regard to the operation he says, at page 31:—"We cannot anticipate much success from the operation in cases of erysipelalous laryngitis, because the erysipelas, having existed for some days previous to its attacking the larynx, will have considerably lowered the powers of the system, and perhaps impaired the condition of the brain. Whether these results might be prevented by the early performance of the operation in question is at present doubtful; but, considering the inadequate relief afforded by other means, it would be right to give the patient the benefit of the doubt."



On the 18th of May, 1850, I was called upon to visit Mrs. S——, aged 63, who was supposed to be on the point of suffocation. I was supplied with the following history of her case by Dr. Leech, who was previously in attendance on her. On the 11th of May she had feverish symptoms, and on the 14th complained of soreness of her throat. Her daughter had just recovered from diphtheritis affecting her mouth and throat; and this appeared to be a similar affection. On the 16th, Dr. Leech was called in; she had then great difficulty in swallowing, and her breathing was slightly affected; the larynx was tender to the touch, and the inside of the mouth and throat was covered with a white membranous coating. Leeches, calomel, and Dover's powder, and a cathartic, were prescribed.

18th. All the symptoms were aggravated; she complains of soreness in one nostril, and stiffness of the eye-lids, and her breathing became so laboured towards evening that a consultation was requested, to consider the propriety of opening the trachea; but leeches and calomel, prescribed in the mean time, were followed by such relief that it was considered prudent to defer the operation till the following morning.

19th. Early this morning her breathing became so difficult that immediate suffocation was dreaded; the erysipelas had extended from the nostril to the face, engaging the nose and right eye-lid; her distress was so great that she eagerly embraced the hope of relief that was held out to her by the operation; her sufferings were greatly aggravated by the swollen state of the epiglottis, which was incapable of performing its functions, so that fluids made their way into the glottis, bringing on violent struggling for breath. The distress she suffered from this was so great that, notwithstanding a burning thirst, she had abstained altogether from fluids for the last twenty-four hours.

At 10 o'clock, A. M., assisted by Dr. Leech, Dr. Davy, and Dr. Barker, the operation was performed, and a silver canula was inserted into the trachea, when immediate relief from all the urgent symptoms was obtained.

20th. Breathes freely through the canula; slept a good deal during the night. The erysipelas has spread, and extends all over the right ear, where the cuticle is raised in blisters. Fluids taken by the mouth still get into the larynx, and are discharged by the canula; they do not, however, now cause the same paroxysms of suffocation. She was ordered bark and wine.

21st. Erysipelas extending; pulse, 120.

23rd. Improved; had a good night. Erysipelas has not spread since yesterday; the whole face is now engaged; no raving; pulse 108; strength increased. The rima glottidis seeming to be open, the canula was withdrawn. Liquids can now be swallowed without difficulty.

24th. Breathes freely, both through the rima and wound, which has been left open; had a restless night; pulse 120; is drowsy, and slightly delirious.

25th. Had a good night; pulse, 92; great drowsiness.

29th. Has continued steadily to improve since last report. The lips of the wound were drawn together with adhesive plaster this day.

December, 1850. It is now more than six months since the operation was performed, and Mrs. S—— has enjoyed excellent health from the time of her recovery, and has felt no inconvenience whatever resulting from it. The wound healed readily, and she convalesced rapidly after the last report given above.

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*Singular Case of Obstruction of the Bowels; with some Remarks upon the Use of Tartar Emetic in Cases of obstinate Constipation.* By THOMAS PUREFOY, M. D., Physician to the Fever Hospital and Dispensary, Cloughjordan, County Tipperary.

ON November eve, 1850, a healthy farmer, aged 58, came in at a late hour to supper, after a day's hard work, and partook freely of frumenty, or boiled wheat, a little before going to bed. On the following morning he resumed his ploughing, but had not been long at labour when he felt a desire to relieve his bowels. The effort to do so was, however, incomplete, as he merely passed some grains of wheat and flatus, and returned to work with an unpleasant sense of fulness in the rectum. During the 1st and 2nd of November he was much distressed by frequent, painful and ineffective efforts to relieve the lower bowel; he had a distinct sensation of something solid and unyielding being impacted in the cavity of the intestine, forming a complete obstruction there, at the same time that it provoked the painful and fruitless efforts to unload the bowel already described. He was first visited on the morning of the 6th instant, at half-past 7 A. M., when he stated the facts just now detailed; he further complained of pain in the back, loins, and thighs, with a total inability to void either urine or fæces. The tongue and pulse were little altered from the healthy state; abdomen slightly tympanitic, but neither tender nor painful; the bladder had been emptied during the night, and he did not suffer from painful over-distention of it, nor could it be detected above the pubis.

An attempt was now made, with only partial success, to introduce a long flexible gum-elastic tube into the rectum; the instrument having been stopped at about seven inches above the anus. Tepid water was then thrown up, but not retained; but in its return it brought away a small quantity of soft and swollen wheat, whole and undigested, at the same time inducing a return of the painful, forcing efforts to unload the bowel.

During the day, three pills were administered, each containing one drop of croton oil, in combination with calomel and the compound colocynth pill; milder purgatives had been already tried in vain. At 6 o'clock in the evening the patient was frantic with pain; the bladder and rectum full to bursting; most distressing pain in the loins, hips, sacrum, and thighs, with occasional attacks of vio-



lent cramps in the lower extremities; pulse quick; tongue natural; abdomen tympanitic, but not tender; face pale, and expressive of much distress and suffering. No position afforded relief, and the poor sufferer writhed upon his bed or upon the floor, or walked wildly about his bed-room, screaming with pain, or crying piteously for relief. These very acute attacks of pain and suffering being paroxysmal, during a moment of comparative ease, or lesser suffering, the catheter was introduced, and a large quantity of urine drawn off; shortly afterwards, having rested for a few moments with the body bent forwards, and the face and chest resting upon the bed, an examination of the rectum was made with the finger, when a soft, tenacious mass was found to fill up the intestine completely, at a little distance above the sphincter ani. Another attempt was now made to throw up tepid water into the intestine by means of the tube and large syringe, with the view of dilating this part, and aiding the expulsive efforts by softening the contained mass. The fluid passed more freely, and when about a pint of water had entered the bowel, the straining and expulsive efforts were renewed with extreme violence. At this crisis, a compact mass or ball, of soft, swollen, glutinous wheat, was found to press strongly against the sphincter ani, but of such a size that the sphincter was thereby excited to contract violently, completely close the anus, and so prevent its expulsion. A scoop was now passed gently into the rectum, and by a continued rotatory motion made with this instrument, the "monster mass" was moulded and elongated into such a convenient form, that the violent efforts of the patient soon succeeded in expelling a large quantity of wheat, which had a very offensive smell, much resembling that of old barm, and evidently the result of a fermentative process commenced in the farinaceous mass, which had now been *in transitu* through the alimentary canal during a period of about six days and nights. Immediate and decided relief followed; the scoop was laid aside, and in half an hour another free discharge followed; it was produced by the natural efforts merely, and consisted altogether of wheat, mixed with a sour-smelling fluid resembling stale barm. The patient again refreshed himself in a tepid salt water bath, which he had twice used during the day, and from his bath, returned to his bed, happy and thankful, where he enjoyed a quiet night's rest. It was remarkable, that, until the last twenty-four hours of his illness, this man suffered comparatively little pain, took some food, and slept occasionally.

The injurious effects of a large meal of indigestible food, taken at an unseasonable hour and under very unfavourable circumstances, were fully manifested in this case. The man had worked hard during the day, and fasted for several hours in the afternoon; then, just before going into bed, he ate heartily of boiled wheat. A long and heavy sleep followed, and on the next day the undigested food produced considerable intestinal irritation, with frequent urgent calls to empty the bowels. A small quantity of wheat was passed, per anum, quite whole, and undigested; the lower bowel, at the same

time, being so much irritated as to occasion distressing tenesmus. When the wheat ceased to be voided, the cause of irritation was over; tenesmus was no longer troublesome, and decided constipation followed, as undigested food accumulated in the colon. Some doses of purgative medicine were employed in vain, so that, when visited on the 6th instant, the patient was found to be suffering much from obstruction of the bowels, complicated with retention of urine. Remedial means were at once employed to overcome the obstruction, and effect the expulsion of the contents of the bowels; whilst it was hoped that the action of the purgative medicine might stimulate the bladder to contract and empty itself. After the lapse of about twelve hours it was found absolutely necessary to relieve the over-distended bladder, and also to devise some means for promoting the speedy evacuation of the bowels, more efficient than any that had hitherto been employed. The bladder having been emptied, the rectum, being examined by the finger, was found to be much distended by a large, soft, but very tenacious mass, which by its presence induced most painful, violent, but ineffective straining and expulsive efforts. This mass was occasionally forced down upon the sphincter ani, producing such violent contractions of this muscle as served completely to prevent its egress through the anal orifice. These violent expulsive efforts being opposed and counteracted by the antagonistic action of the sphincter, occasioned indescribable suffering to the patient. With a view to facilitate the expulsion of the contents of the rectum, by altering the form and lessening the bulk of this mass, and at the same time resisting mechanically the spasmodic closure of the anus, a scoop was employed, as above described, and fortunately with the desired effect. The retention of the urine was a most troublesome and serious complication, and might, perhaps, have been occasioned by the pressure of the over-distended rectum upon the prostate gland and neck of the bladder; or possibly the sphincter muscles at the neck of the bladder, sympathetically took on a spasmodic contractile action, similar to that of the sphincter ani.

It was remarkable that this unwholesome food should have passed the pylorus and ileo-cæcal valve, and finally be retained in the colon, where it was evidently moulded into soft, tenacious balls, or rather masses, and had undergone a partial process of fermentation, before it was finally expelled.

*Two Cases illustrative of the Effects of Tartar Emetic in obstinate Constipation of the Bowels.*—A young man of active and industrious habits (being in good health at the time) became indisposed and feverish. He remained in bed, and used repeated doses of mild purgatives, but without the desired effect. The most active purgatives were subsequently given, but they proved wholly inefficacious. Fever, thirst, tumefaction, and tenderness of the abdomen set in, after the existence of constipation for about three days, during which period several active purgatives were judiciously employed, without any benefit whatever. Under these circumstances, the one-eighth of a grain of tartar emetic was administered in camphor mixture, at



short intervals, so as to keep up a constant state of nausea. Its use having been continued for about twelve hours, the patient became much prostrated, and while in this state the bowels were freely moved. No unpleasant result whatever followed, and convalescence was quickly established.

CASE II.—A poor woman, aged 50, who had been for many years subject to obstinate constipation, accompanied by much pain, thirst, vomiting, and tympanitis, had a return of one of these attacks during the summer of 1850, to relieve which she employed a variety of active purgatives, but in vain. Croton oil was subsequently exhibited, and afterwards the tobacco enema, but without moving the bowels. At this juncture, tartar emetic was employed, as in the preceding case, and with the best effect, as the bowels were freely opened in a few hours. The patient was decidedly relieved, and for two days there were good hopes of her recovery; however, low fever, thirst, and diarrhœa set in, and in a few days terminated her existence.

The preceding cases afford satisfactory proofs of the efficacy of tartar emetic in removing obstinate constipation of the bowels, even where the most effective remedies usually employed in such cases have failed. Although the second case terminated fatally, yet the tartar emetic succeeded in removing the obstinate constipation which had existed for several days; and there is little doubt that death was the result of chronic disease of the bowels, aggravated and rendered acute by the occurrence of this last illness. Tartar emetic would appear to be a more manageable, and less dangerous remedy, in cases similar to those stated, than the tobacco infusion; and even where there is reason to apprehend the existence of chronic disease in the bowels, the cautious administration of tartar emetic as here recommended can scarcely be attended with any risk.

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*Case of Spontaneous Cure of a Tumour in the Rectum of a Child which was treated for Prolapsus Ani.* Reported by W. D. MOORE, M. B.

IN March, 1850, I was consulted by Mrs. E. about her son, a remarkably fine and healthy boy, then aged between four and five years. She stated, that at the time of each alvine evacuation the gut protruded, and the case was considered to be one of prolapsus ani. Under the use of an astringent lotion and the other ordinary means, the symptoms subsided, but returned in the course of the summer, when Dr. Johnson was consulted. The supposed prolapse continued to occur every time the child went to stool, until 1st December; it was easily returned, and never took place except when the bowels were moved. In consequence of this, and his subsequent absence from town, the prolapsed part was never seen by any one except the mother or nurse. Slight hemorrhage occasionally occurred, but the child enjoyed good health; his bowels were regular, and his appetite good; yet, although he had the advantage of spending the

autumn in the South of Ireland, at the sea side, he looked less healthy than he had done before he became liable to this affection. On the 1st December, immediately after having been at stool, something dropped from him, which was found to be a hollow fleshy tumour, of a firm consistence, about the size of a cherry; and on examining him, no trace of the prolapse could be discovered. When the bowels acted next day a quantity of clotted blood was passed, and nothing like prolapse has taken place from that time to the present date.

Tumours in the rectum are extremely rare in such young children; and I believe there has hitherto been no case recorded in which nature was able to accomplish a spontaneous cure. It is not easy to say how the separation actually occurred; it could not have been by constriction of the sphincter, as the tumour was always immediately and readily returned, and for this reason no force capable of effecting its separation was ever employed; neither was the appearance of the tumour such as to lead one to attribute its removal to either of these causes.

I have been induced to place this case on record because it is one of very rare occurrence, and because it shows the necessity of making, under such circumstances, a careful investigation, and of not relying on the reports of the friends and attendants. In consequence of the facility with which the tumour was always returned, and of the child having been for several months out of town, we had not an opportunity of examining it, or, of course, it could readily have been ascertained that the disease was not prolapsus ani. It is remarkable that the first symptom was the protrusion of the tumour, and that the child had never suffered from hemorrhoids or any irritation of the rectum at any previous period, nor had he ever had any attack of diarrhœa or dysentery.

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*Case in which the Metacarpal Bone, and first Phalanx of the Thumb, were removed for Caries.* By JOHN HAMILTON, Surgeon to the Richmond Hospital.

THE extraction of a diseased or injured metacarpal bone, leaving the phalanges, is rarely performed, perhaps too rarely: although in the works on operative surgery by Malgaigne, Velpeau, &c., elaborate directions for its resection are given. When the metacarpal bones of either the middle or ring fingers are in question, the most judicious course is, I believe, not to attempt to save the finger. Even in the little finger it may be fairly doubted whether, after the removal of the metacarpal bone, the finger could be either useful or comely. I have no doubt, however, that we should do our best to save the phalanges of the forefinger or thumb, as even an imperfect use of these fingers, so necessary in the prehension, touch, and appreciation of bodies, is most desirable.

In the case I am about to relate, not only was the metacarpal bone of the thumb removed, but subsequent circumstances rendered



the ablation of the first phalanx necessary; and yet the thumb, so shortened of its fair proportions, is of the utmost value in feeling or holding small bodies, and in grasping large ones.

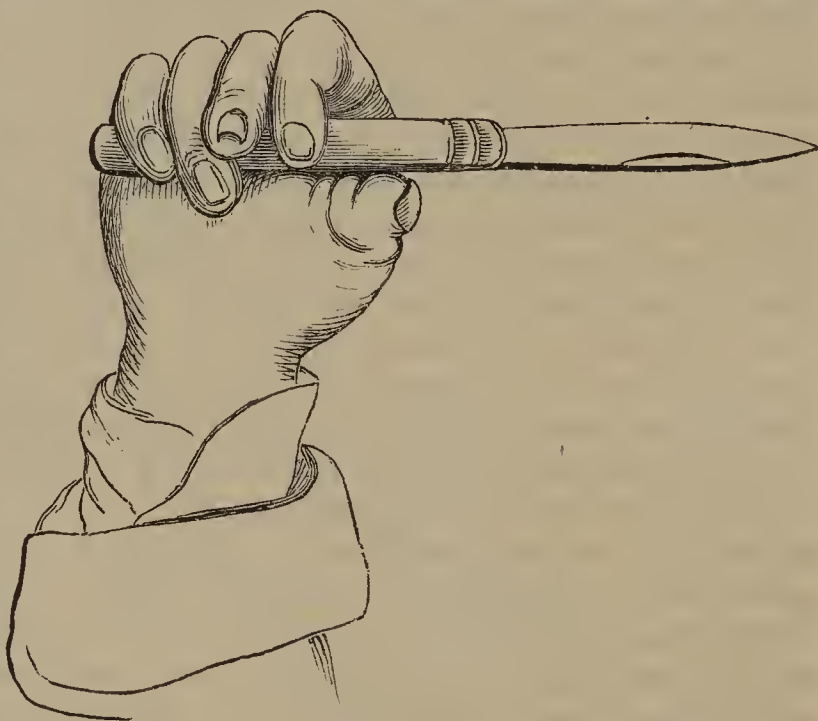
W. Hill, aged 40, a ship carpenter, living at 45 Blundell-street, Liverpool, came from that town, July 8, 1848, to Dublin, and was admitted into the Richmond Hospital, with chronic synovitis of the right knee. It was cured by the ordinary treatment.

Besides this the thumb of the right hand appeared to be seriously diseased; the parts around the metacarpal bone were greatly swollen, of a livid red colour, with four small fistulous openings; examined by a probe, these led down, at some distance from the surface, to diseased bone, which felt loose, particularly at its upper part. This complete disease of the metacarpal bone led me to the conclusion that the only treatment was amputation of the whole thumb down to the carpal articulation. He prayed, however, so hard not to lose the whole thumb, which he asserted to be essential to his trade; that I determined to give him the chance of retaining the phalanges and fleshy ball of the thumb by removing the metacarpal bone alone. In performing this operation, besides the necessary caution against cutting across the tendons or wounding the blood-vessels, I was particularly careful not to hurt the nerves, as I have always observed accidental division of the nerves supplying the fingers, by cuts of knives, bits of crockery, broken glass, &c., to be followed by total uselessness of the finger, which, its supply of innervation cut off, becomes insensible, at times cold and livid, and at times hot and painful, and liable to partial or complete mortification on the slightest injury, from burns particularly, to which the insensibility renders it very obnoxious.

I made an incision the whole length of the metacarpal bone, on its dorsal surface. From the swelling of the soft parts the diseased bone lay deep, but by careful cutting I cleared the upper part, which came away when I seized it with a forceps; it proved to be the upper third. I next removed the middle portion, small and much corroded. The lower remaining part required great care and much nice dissection with a probe-pointed bistoury, guided by my nail, it was so imbedded and consolidated by long-continued inflammation (the origin of the disease dating two years back). The chief and great difficulty, however, was, that from the surface of this portion of diseased bone arose many sharp projections or spurs, so that the bistoury could not be carried evenly along its surface, but had to be carried with the greatest care over these obstructions, or the adjacent tendons, vessels, and nerves, must have been inevitably divided.

March 22, 1849. He went on well after the operation, the only accident being an abscess at the upper and inner part of the ball of the thumb, and he left the hospital with the thumb beginning to assume a natural aspect and to be useful, as he could grasp objects of moderate size, such as a pencil, for instance, between the finger and thumb. There was, however, a small fistulous opening. After

having been for some time in Liverpool, an abscess formed near the fistula, and broke, and soon after a second formed; this brought him over to Dublin again. I opened the abscess, and found at its bottom, diseased bone, the proximal end of the first phalanx, in a state of caries. Through a proper incision I removed the whole of the first phalanx, leaving as the only solid bony support of the thumb the last phalanx. The wound healed slowly, and it was altogether a twelve-month from the first operation until the last cicatrized. He was, however, well repaid, by having a very useful member. Last February he wrote to me, saying, "My thumb is perfectly stout; I can use it to anything that is required." He came afterwards to Dublin on some business, and it was really curious to see how the soft parts had accommodated themselves to their altered relations, and what useful and varied motions could be performed by the abbreviated



thumb. I got Mr. Conolly to take a drawing of it, which exhibits the prehensile power remarkably well; he could also hold small objects between the forefinger and thumb very well.

The case certainly was by no means a favourable one for the operation; it is therefore only the more encouraging to lead us to try and save the phalanges whenever we think their presence could be useful.

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*Cases occurring in Ophthalmic Practice.* By S. BROWNE, Esq., R. N., Surgeon to the Belfast Ophthalmic Institution.

CASE I. *Pterygium-like Growth, ending in Cancer; Extirpation of the Eye; Return of the Disease.*—Patrick Donnelly, aged sixty-five, by trade a porter and bottler in a wine store, applied at the Belfast Eye Dispensary, in the month of August, 1846, relative to a disease of some duration in his right eye. The history he gave of his ailment may be briefly stated as follows. About two years preceding the date of his application, he had observed some redness in the right eye, attended with slight dimness of vision, a constant flow of tears, and some pain, especially when he was obliged, in the performance of his duty, to remain in a stooping posture for any length



of time. At that period he had applied to the late Dr. Sanders, who it seems repeatedly scarified the conjunctiva, and had ordered a solution of nitrate of silver to be dropped into the eye. Leeching had also been directed, and alterative medicines given; "but," to use the words of the patient, "nothing seemed to agree with it," and the complaint went on up to the time when he first came under my observation. There were then present a large number of thick, tortuous vessels, reaching over the upper part of the sclerotica towards the cornea, upon the superior segment of which they formed a fine vascular film: through this the half of the iris and covered portion of the pupil could be dimly seen. The lower portions of the cornea and iris, with nearly one-half of the pupil, were quite clear, and, consequently, objects beneath the level of the eye were distinctly visible to the patient. The whole of the conjunctiva covering the upper and outer part of the sclerotica was quite vascular and thickened, while all the inner and lower portion was pale and healthy in structure. The palpebral conjunctiva was not engaged in the disease, nor were the eye-lids in any respect unnatural in appearance. In fact the diseased structure seemed to be merely one of those irregular conjunctival growths, classified under the denomination of *pterygium*; and had it not been for the amount of pain which it caused, there would not have been anything very remarkable in the affection. I may here also state, that his general health, hitherto good, began to decline about this time.

My first object in the treatment was to allay the suffering which the patient complained of, and this I accomplished by desiring him to use soothing fomentations and an opiate collyrium, and to lay aside all irritating applications. He also took anodyne and tonic medicines, and under the use of these he gradually improved in health. The disease, moreover, did not extend, but for some months seemed to be almost stationary in every respect; and early in January, 1848, I determined to remove the morbid growth. This I accomplished by raising it up with a forceps, and dividing it completely across with a pair of scissors, at about two lines from the margin of the cornea; the upper portion I dissected clean up to the point from which the enlarged vessels seemed to spring; and the lower part I turned off from the superior half of the cornea by light touches of a very sharp knife. No inflammation of any importance followed the operation, and in three weeks afterwards the conjunctiva was renewed and almost normal in appearance; the cornea was nearly clear; and the eye presented no remains of the former appearance save a thickened, vascular, and irregular margin, where the conjunctiva had been cut at its reflection upon the upper eye-lid. For some months after this he ceased to attend, and did not present himself until the following August, when I learned from his statement that the eye had remained pretty well, and without any pain, until within the last few weeks; about that time he first began to feel a return of the uneasy sensation formerly experienced, and observed the vessels to be

again increasing in size. Upon examination I found that the disease had resumed much of its previous appearance, though it was not so great in extent. After a few days I once more removed the pterygium-like growth, by an operation similar to that performed in the first instance, taking great care to excise every portion of the thickened conjunctiva. Again this tissue was quickly renewed and healed up, leaving scarcely a trace of disease beyond the contraction caused by the cicatrices, and some opacity of the upper segment of the cornea. On this occasion the necessity of appearing once in every week at the institution was enforced upon the patient. For about two months succeeding the last operation there was little change observable in the part, and the patient did not complain of any pain in the eye; at the end of that time, however, a few thick tortuous vessels began to radiate from all sides towards the cornea, which soon became almost entirely covered, and presented the appearance termed *pannus*. As the growth enlarged, along with it also increased the uneasiness in the organ, until at length a constant severe, occasionally excruciating, pain, was felt there. The disease then progressed very rapidly, so that in the month of March, 1849, the entire ocular conjunctiva was greatly thickened, and raised into hard, irregular nodules. The true character of the malady, which I had long suspected, was at that period unquestionable. I then felt it my duty to explain fully to the patient the nature of his complaint, and to assure him that his only chance was to have the eye forthwith removed; expressing it as my conviction, that unless he submitted within a very limited period, the time for surgical interference would have passed by. It was not, however, until the month of June, when his suffering had become extreme, with sleepless nights, which no opiates could relieve, and when his health began rapidly to give way, that he would consent to an operation. His description of his sufferings, at that time, was sufficient to excite compassion in the most callous. He said he "felt as if a live coal occupied the eye-ball, while a saw was dividing his head, as it were by rapid jerks, and burning hooks were dragging out the centre of his brain," causing an amount of torture beyond physical endurance.

At that time the eye-ball, or rather the investments of the globe, had become very much enlarged, and it was almost immovable in the orbit, from which it projected to a considerable extent. The eye-lids were still free from thickening, or apparent disease, and moved as freely as the projecting mass would permit.

Under these circumstances, having maturely considered the matter, and with the concurrence of my medical friends, to whom I had exhibited the case, I determined to give the poor sufferer the only human means of relief from his agony, and the only chance of prolonging his life, for even a short period. He was, therefore, removed into the General Hospital, where, on the 28th of June, 1849, the eye was extirpated in the following manner. The patient was placed upon a high table, with the head and shoulders elevated, and



the face turned well to the right side, so as to bring the diseased part into such a position, that the blood would, after the first incisions, flow *from* the orbit, and prevent its collecting there so as to impede the operation. As soon as the patient was fully under the influence of chloroform, I carried a curved needle, armed with a strong ligature, deeply through the scirrhus mass; divided with a bistoury the external commissure of the eye-lids to its greatest extent; and, having the lids held apart by an assistant, I plunged a doubled-edged scalpel, curved on the flat, into the outer and upper part of the orbit, and rapidly separated all the attachments of the conjunctiva, on every side, by sweeping the knife from without inwards along the roof of the orbit, and then from within outwards along its floor, taking care to keep the convex side of the scalpel close to the walls of the socket. The eye was then drawn forwards, and to the outer side, while the knife was carried to the bottom of the orbit, where the optic nerve and the attachment of the muscles, were divided close to the bone. The hemorrhage was very profuse for a few seconds, but having sponged out the orbit, and then filled it with a strong infusion of matico, the bleeding was soon reduced to a mere oozing: the socket was then most carefully examined, when not a particle of diseased structure could be discovered. A compress of lint, saturated with the matico, was next introduced within the orbit, and retained there for three hours, when it was gently removed; the lids were brought together, the commissural wound being united by a couple of fine points of suture, and the whole covered with a light cold water dressing. There was no return of the bleeding, and very little inflammation of the part or constitutional disturbance followed. In a few days healthy suppuration was established, and the socket gradually filled up with apparently sound granulations. On examining the scirrhus growth which had been removed, it was found to be of the true cancerous structure. The entire ocular conjunctiva, the epithelium of the cornea, and the fibro-cellular tissue between the muscles and the sclerotica, were changed into a thick, hard, irregular mass. The muscles were not much diseased, and the fatty substance *behind* the tunica vaginalis oculi, removed along with the morbid growth, did not exhibit any trace whatever of the carcinomatous deposit. On making an antero-posterior section of the diseased structure and the eye, the sclerotica, the inner side of the cornea, and the other tissues and humours, seemed quite healthy. The principal scirrhus growth was attached to the upper and outer part of the sclerotica, insinuating itself deeply beneath the levator palpebræ superioris, and involving the superior and lateral recti muscles. This portion of the growth had invaded the lachrymal gland, which had become fused, as it were, into the general mass of the disease.

For fully six months after the operation the patient enjoyed complete immunity from any apparent return of the affection; nor did he, during that time, feel the slightest pain in the part or in

the head. Throughout the period mentioned I saw him frequently, and could not observe any tendency to disease. However, in the month of January, 1850, I discovered a very hard tumour, as large as a pea, in the situation of the trochlea of the superior oblique muscle. This increased slowly at first, but, by the end of April it had extended so as to occupy a large portion of the orbit. The eye-lids, it is remarkable, were still free from the disease; nor was it, indeed, until some months after that they became involved in the destructive process.

In the summer, I may observe, the patient had a severe attack of dysentery; during the time it lasted, the morbid growth not only did not increase, but even seemed to have much diminished in size. At that period the chain of superficial cervical lymphatic glands became inflamed and suppurated, discharging healthy pus.

Until the month of August the suffering was not very severe, but since that time, the disease having rapidly increased, the sensation of pain has become gradually more and more excruciating. Since May last the morbid structure has assumed the character of the medullary sarcoma, which now, at the time I write, 30th December, 1850, has invaded all the neighbouring parts, presenting a frightful mass of cancerous growth. This bulges out in front for more than two inches before the level of the sound orbit, pushes up the orbital plate of the frontal bone, so as to raise the arch of the brow far above its fellow; it passes outwards and downwards, involving the parotid gland; inwards, destroying the nasal and ethmoid bones; and backwards and downwards into the right nares. Latterly the destructive ulcerative process has commenced near the root of the nose, and frequent bleedings have taken place, which have much reduced the patient's strength, who now hopes to be soon relieved by death from the agony which he has so long endured.

*Remarks.*—The foregoing case is very interesting, as it clearly illustrates the rise and progress of one of the most fatal, intractable, and painful maladies that “flesh is heir to.” It is an example of carcinoma, arising as pointed out by Mr. Travers in his “*Synopsis of Diseases of the Eye*,” and justifies his opinion, as expressed in the following remarks: “I had formerly been led to suppose that the malignant disease termed cancer affected the ball or globe of the eye. Such is the doctrine of most writers on the subject. I have, however, satisfied myself, that, as regards the eye, this disease is peculiar to the lachrymal gland, conjunctiva, and eye-lids,” &c. And again: “There is a malignant fungus of the conjunctiva, for, like the mucous membrane of other parts, this is sometimes the seat of carcinoma; and, excepting the lachrymal gland, I believe no other texture related to the organ of vision is ever primarily so affected.”

The history of the case, and dissection of the morbid mass after removal, demonstrate the fact that the conjunctiva was the part primarily affected, without the other textures of the eye-ball being



at all engaged. Doubtless, in process of time, these would have either been invaded by the malignant deposit, and have thus been destroyed, or the pressure of the surrounding scirrhus mass would have caused absorption and wasting of the various tissues and humours of the globe.

One or two questions of practical value naturally arise out of the history of this case. Should the pterygium-like growth have been interfered with in the first instance? Would extirpation of the eye at a much earlier period have prevented the return of the disease? And was the operation justifiable at the advanced stage of the complaint when it was performed? In reply to the first query, I can only say that I was guided by my experience of more than one case, bearing a very close analogy to that under consideration, in which the removal of a large mass of thickened conjunctiva, and even scraping the vascular epithelium from the surface of the cornea, were followed by most satisfactory results, the conjunctiva having been renewed, and the cornea completely restored to a transparent condition; therefore I saw no reason to fear any evil consequence in this instance, though it was so extensive, and attended with an unusual amount of pain. With respect to the second question it is impossible to determine, but there is some reason to suppose that had the operation been submitted to, as soon as the true character of the disease was unquestionable, the patient would have had a very fair chance of being completely freed from the malignant affection. Then, as regards the last query, I feel satisfied that the man must have sunk under his accumulating sufferings very soon, had the operation not been resorted to. It is needless to argue the propriety of endeavouring to prolong life for even a short period; but in this case there was still a reasonable hope that the disease might have been completely got rid of, especially as the eye-lids, and all the parts outside the orbit, were, so far as the most careful examination could determine, entirely free from any malignant taint.

The operation of extirpation of the eye is justly regarded as a very painful one, and one, besides, which gives a very severe shock to the nervous system; but chloroform, duly administered, certainly does away with the first objection entirely, and doubtless thus also very much modifies the danger from the latter. In this case the patient was not cognizant of the slightest pain, and, as has been shown, the system did not appear to have sustained any serious shock. This operation is one of the few in ophthalmic surgery in which the administration of chloroform is admissible; but in this and in the removal of orbital tumours and diseases of the eye-lids, it should certainly be always employed.

I have only one further remark to make, and that is regarding the position of the patient, and the use of a knife alone. By having the patient placed upon a very high table, with the diseased part inclined very much towards the affected side, the structure to be

removed is brought more directly before the view of the operator, while the inclination of the orbit permits the blood to flow freely away, and thus leave the parts clear.

I found the double-edged scalpel, curved on the flat, a knife suitable, in every respect, for the division of all the attachments of the eye, both superficial and deep; for by it I was enabled to remove the entire contents of the orbit with the greatest facility, and in a very few seconds. I therefore do not see the necessity for using the curved scissors as recommended by some authors.

CASE II. *Infiltration into the Areolar Tissue within the Orbit, causing great Projection of the Eye, with almost complete Amaurosis.*—Jeremiah Cumming, aged 40, by occupation a farm labourer, of a very cachectic appearance, came under my observation at the Ophthalmic Institution, in the early part of October, 1849. At the date of his application he stated that for more than three months he had been slowly losing the sight of the left eye; that he felt a severe, deep-seated pain within the orbit, acute pain in the brow of the same side, and constant headach, and that all these symptoms had gradually increased from the period when he first felt anything of his complaint. He ascribed the origin of his disease to over-exertion in the early harvest season, and exposure to cold after being heated. He had not observed any redness of his eye since it became affected. On examining the affected organ I found the globe apparently enlarged and thrust forwards, so as to project somewhat from between the eye-lids; the pupil was dilated and almost insensible to the impression of light; the eye-lids were pale and swollen; the conjunctiva quite natural in appearance. On raising the upper eye-lid, and further examining the eye-ball, I at once saw that its seeming enlargement was only apparent, and was caused by the globe being pushed forwards, as I have already remarked. The question now to determine was, what caused this projection? did it arise from a simple encysted tumour, or from a malignant growth, which the man's exceedingly unhealthy leaden aspect might have led me to suppose, or merely from effusion into the areolar tissue of the orbit, the consequence of slow inflammatory action? This last view of the case I adopted, first, from the history of the complaint, and secondly, from the appearance and feel of the eye-lids, and also from a soft diffusible swelling which occupied the left temporal space, and was connected with the swelling observable in the eye-lids. With this impression I had the man admitted into hospital on the 16th of October. Twelve leeches were ordered to be at once applied around the eye and to the temporal space, and a pill containing two grains of calomel, one-twelfth of a grain of tartarized antimony, and half a grain of opium, was directed to be taken every six hours. On the 18th and 20th, eight leeches were again applied, and, as the system was not yet affected, the mercury was ordered to be continued. On the 22nd the following report appears in my case book:—"The eye



is less projecting, the swelling in the eye-lids and temporal space much reduced, the pain in the orbit is gone, and vision is much improved; the pupil is less dilated, and acts under the influence of light; the mouth is tender. To have only one pill at night." From this date until the 27th he continued to take the single pill daily, and had four leeches once applied. The improvement in vision was progressive, and the prominence of the eye and the swelling in the temporal space gradually diminished. On the 27th the pill was omitted; a blister, to be dressed with mercurial ointment, was applied to the left temple, and a tonic mixture, containing the citrate of iron and quina, was ordered to be taken. On the 30th of October he was discharged, at his own request, and was supplied with an ointment composed of the iodide of potassium, twelve grains, camphor, sixteen grains, and lard one ounce, rubbed up with four drachms of the mercurial ointment. He was directed to apply a portion of this by friction to the eye-brow and temple daily, until his eye was restored to its natural condition.

As he lived at a considerable distance from Belfast, I did not again see him for several months, at the end of which time, however, I found him in excellent health, and with his sight quite as good as it ever had been; and he stated that in a fortnight after he returned home he left off all interference with the eye, as he felt there was not then "anything the matter with it."

*Remarks.*—The case just related seems to have been one of rheumatic inflammation of the tunica vaginalis oculi<sup>a</sup>, and of the other fibrous tissues within the orbit, extending to the temporal fossa, followed by infiltration into the areolar tissue of these parts, somewhat similar to those first related, I believe, by Mr. O'Ferrall. The amaurotic symptoms arose, doubtless, from the pressure to which the eye-ball, and the strain to which the optic nerve were subjected; consequently, as soon as the exciting cause ceased, the effect gradually ceased also. The aspect of the patient was such as to cause me at first to apprehend some malignant affection; and the amount of pain suffered, without any external sign of inflammation, tended to increase that fear; therefore it was only the history of the case, and the touch of the swollen eye-lids, along with the pitting on pressure of the diffused tumour in the temporal space, which indicated the true nature of the disease. I do not attach great importance to the application of leeches in the treatment of this case; on the contrary, I feel quite assured that affecting the system with mercury, and using frictions with an ointment containing the iodide of potassium, would as certainly, and perhaps as quickly, have removed the affection, as the plan I adopted.

<sup>a</sup> Since writing this case another of a precisely similar kind has come under my observation; the same plan of treatment was adopted as in the former, and a cure effected in fifteen days.

CASE III. *Severe purulent (gonorrhæal?) Ophthalmia of both Eyes; partial Sloughing of Corneæ; Good Vision preserved.*—C. B., aged 39, a married female, of pale, delicate appearance, and with a seemingly broken-down constitution, applied at the Ophthalmic Institution on the 10th of October, 1850. The eyes being completely closed up, she had to be led into the consultation room, where the nature of her disease was at once apparent. The eye-lids were very much swollen, and of a dusky red colour, with the chemosed conjunctiva projecting between their margins. On separating them an almost incredible amount of purulent secretion flowed down in a stream over the cheeks; this secretion was of a cream-like consistence, and of a pale yellow colour. On clearing the surface of the conjunctiva, and gently parting the upper and lower lips of the chemosed portion, the corneæ could be partially seen; that of the right eye was nearly lustreless and of a greyish hue, with a small slough occupying its outer and inferior segment. The left presented less change in appearance, and possessed more brilliancy, but with one point near its outer margin evidently softened and tending to disorganization. The pain was very severe, and exposure to light caused great anguish. The pulse was 110, and very weak; the skin cold and clammy, and the tongue pale and tremulous.

After having given her a cordial laxative draught she was removed to the hospital; jars containing hot water were directed to be applied to her feet, and she was ordered to drink warm tea. At the evening visit I found her skin of a natural heat, and the pulse somewhat fuller in volume; the draught had operated freely, and she expressed herself as then feeling generally more comfortable than in the morning. Having cleansed the eyes by copious affusions of tepid water, I pencilled the entire of the chemosis with solid nitrate of silver, and ordered that every third hour the discharge should be gently removed by means of warm water pressed from lint, after which a lotion composed of the sulphates of alumina, copper, and zinc, of each eight grains, dissolved in eight ounces of water, with four drachms of the sedative liquor of opium, should be freely instilled between the lids. I also prescribed a powder of two grains of calomel, with five grains of Dover's powder, to be taken twice daily. Next day, the 11th, the chemosis appeared less, though the quantity of purulent secretion was even greater than before; in fact it poured from the eyes. So far as the cornea could be seen it was evident that the disorganizing process had not extended. The pain in the eyes was greatly lessened, and, except from the smarting sensation experienced after each application of the lotion, the patient did not complain of much suffering. The nitrate of silver was applied as before, and the former treatment was directed to be continued. On the 12th full diet was ordered, and a powder of five grains of powdered cinchona bark, with five grains of the bicarbonate of soda, was ordered to be taken thrice daily; she was also to have two ounces of port wine in the day. On the 14th the case book reports: "The



eyes much better; the sloughs of the corneæ not at all extending; the purulent discharge very much diminished, and vision very greatly improved." The local treatment, as at first adopted, had been continued up to this period. After this time the nitrate of silver was applied every second day, and the lotion occasionally, while extract of belladonna was kept smeared over the eye-brows, as, at the points where the sloughs of the corneæ had separated, there was some tendency to prolapsus of the irides. Save the omission of the calomel powder on the 14th, an increase in the quantity of wine to four ounces daily, and the application of blisters to the temples once, there was not any change in the treatment until the 28th, when the following report appears: "Eyes very much better; no purulent secretion; there is some lachrymation on exposure to light. The sight in the left eye is quite good; in the right it is still obscured, and there is a considerable-sized, fungus-like growth from the prolapsed iris." This excrescence was touched daily with a point of nitrate of silver, and belladonna was kept constantly applied around the eyes. On the 4th of November there was little remaining trace of disease, save some slight irregularity in the shape of the right pupil, and the changes in the structure of the corneæ where the ulcers had healed; but, as these were not in the axis of vision, the sight was nearly as good as before the attack. On the 6th of November the patient was discharged, and desired to attend for some time as an extern patient. After a fortnight she left off attending, as the eyes were quite well, and her health very much restored.

*Remarks.*—This case of purulent ophthalmia, one of the most severe I have ever seen, pretty clearly illustrates the curative influence of the nitrate of silver in a disease so fraught with danger to the integrity of the organs of vision: in fact, I am convinced that by no other known method of treatment could sight have been preserved in this instance. I have seen depletion (quite out of the question in this case), scarification, as practised by Tyrrell, and all the various methods which have been adopted by those who are afraid of what they call "irritating applications," fail; but I can safely assert that in no instance of purulent ophthalmia, which has come under my observation, have I ever found the free application of nitrate of silver fail in arresting the disease and preserving sight, provided the first application had been made before change in the structure of the cornea had taken place; and, moreover, that in several instances, as in the one under consideration, I have been enabled to prevent further mischief ensuing, although the destructive process had set in. Many practitioners are either afraid to use what is most wrongfully named a "caustic," or are so wedded to the notion that depletion is absolutely necessary in all inflammatory attacks, especially of the eye, and that soothing applications are alone suitable to such a delicate organ, that they cannot bring themselves to adopt the *free* use of the nitrate of silver; and hence many eyes are seriously

injured, or lost, in purulent or gonorrhœal ophthalmia, by a most reprehensible dallying with a very dangerous disease. I have reason to think that the attack, in the subject before us, arose from direct inoculation with gonorrhœal matter; and certainly the *aspect* of the case bore testimony to that as the exciting cause, judging, as I do, from the experience of a large number of cases of purulent and gonorrhœal ophthalmia which have come under my observation during the last twenty years. I did not, however, speak of it absolutely as a case of gonorrhœal origin, as I could not arrive at certain conclusions; but it matters little by what distinctive appellation it may be named, as the treatment pursued was, in my opinion, the only one that could have been successfully adopted. It may be asked if I deemed the exhibition of calomel absolutely called for? In this case I think it was, as all the secretions seemed in a vitiated condition, but the moment these were improved I substituted tonics. I very seldom give mercury in purulent ophthalmia, save as a purgative along with some other medicine, as I do not deem it all essential to the safe treatment of that complaint. With regard to depletion, either local or general, in this disease, its employment must entirely depend upon the state of the system, whether vigorous or otherwise, of the person under treatment, but, *per se*, I should be very sorry indeed, in any case of severe purulent or gonorrhœal ophthalmia, to place dependance upon the abstraction of blood.

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*Case of Idiopathic Glossitis involving half the Organ.* By ARTHUR LEARED, M. B., Physician to the Oulart Dispensary, County Wexford.

AUGUST 14th, 1850, Patrick Rice, sixty-nine years of age, a farmer, states that he first complained about a week since of a sore mouth and tongue, which have gradually increased; he attributed it to a wetting received in attending a funeral the day previously. Four days after, I saw the case for the first time, and on examination I found the base of the tongue on the left side very hot and somewhat tumid; but my attention was not at first arrested by the peculiar condition of the organ. For the last few days he has been almost incapable of swallowing, and to-day it may be said he is quite so. He is unable to separate his teeth more than about half an inch, and clear glairy saliva constantly flows from his mouth. His articulation is so obstructed that it is with the greatest difficulty he can be understood.

On a careful examination with my finger, I ascertained that the tumefaction was wholly confined to the left side, extending from the summit along the dorsum of the tongue into the pharynx, and involving its entire thickness, so that its motions are almost completely impeded from the encroachment upon the space here allotted to them. The root of the organ and floor of the mouth on this side are also much engaged, but the gums not at all so. The tip of the



tongue can scarcely be protruded beyond the teeth; its surface, and as far as can be seen of the remainder, especially towards the affected side, presents a peculiar pale and sodden appearance. The contrast between the two portions is well defined by the mesian line: when felt by the finger that on the right is found to be soft, flaccid, of natural dimensions, and comparatively cool, contrasting in a marked degree with the unyielding, tumid, and burning sensation imparted by the other. Externally there is considerable tenderness beneath the angle of the left jaw; his pulse is 88, and there is great debility; the bowels are not constipated. The treatment I endeavoured to adopt was the direct application of leeches to the tongue, as recommended by Dr. Graves<sup>a</sup>, but this, after having been attempted by means of threads passed through their extremities, I was compelled to abandon, owing to the great difficulty of application from the closed state of the jaws, two only having imperfectly drawn blood. Five others were applied to the affected part of the throat, and directions given to have it subsequently assiduously fomented, as also the tongue itself, by means of hot water taken into the mouth. An electuary containing five grains of calomel and ten of jalap was carefully placed on the organ, as far back as possible.

15th. The electuary was swallowed last night with the greatest difficulty; it has operated freely this morning; his pulse is now 84; tongue less swollen; articulation somewhat improved, and the teeth can be farther separated. He has been able to take some chicken broth. The electuary was ordered to be repeated.

17th. Improvement in every respect so marked that he may be considered almost convalescent. Electuary to be again repeated.

November 1st, 1850. The man is at present in perfect health. I have lately examined his tongue, and found all traces of the complaint quite gone, neither induration nor enlargement remaining.

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*Abscess of the Spleen, communicating, through the Diaphragm, with a gangrenous Cavity of the Left Lung; Portal Phlebitis; Diffuse Inflammation between the Stomach and Liver.* By ROBERT LAW, M. D., Professor of the Institutes of Medicine, and Clinical Professor in the School of Medicine in Ireland, &c., &c.<sup>b</sup>

MARY MATTHEWS, servant, aged 26, unmarried, of a pallid, strumous aspect, was admitted into Sir Patrick Dun's Hospital, November 27th, 1850, in a state of extreme exhaustion. She complained of most distressing oppression of her breathing, and of pain in the left side of her chest. There was a fetor<sup>c</sup> from her breath which alone would

<sup>a</sup> Clinical Medicine, by Neligan, vol. ii. p. 196.

<sup>b</sup> Read before the Pathological Society of Dublin.

<sup>c</sup> There is something so very peculiar in the fetor of gangrene of the lung, that, when once perceived, it is ever afterwards easily recognised. I was called to see a gentleman about twenty-five years of age, who had spat blood,

have satisfied me of the existence of gangrene of the lung. She had a most distressing cough, with expectoration of a dirty brown frothy mucus, emitting the same fœtor as the breath, but in a less degree. The left side of the chest was dull to percussion in its postero-inferior half, and corresponding to this dull sound auscultation discovered a distinct amphoric resonance through a large muco-crepitant râle, amounting to gargouillement. The rest of this side, both posteriorly and anteriorly, was clear when percussed, especially so below the mamma; and the respiration was heard distinctly, except under the mamma. Both percussion and auscultation confirmed the integrity of the right lung. The heart's action was peculiarly rapid, so that it was quite impossible to analyse its sounds; in fact but one sound could be heard. Pulse 130 in the minute, and very small. Her cough had a peculiar tracheal character, and gave her much annoyance; it quite prevented her from sleeping. She had very heavy perspirations at night. She had distressing thirst, but no desire for food. The tongue was quite clean. The history that I obtained of her case was, that having drank cold water when the menstrual discharge was present, she was suddenly seized with violent pain of the abdomen. The medical man who saw her soon after the pain came on found her writhing with agony, with the abdomen enormously distended with flatus. He tried to introduce a large gum-elastic tube into the rectum and up the intestine, but without success, till some blood was taken from the arm; then the parts seemed to relax, and allowed the tube to pass. Injections thrown up brought away a large accumulation of fœces, and quite removed the tympanitic tension. The pain, however, did not subside, and a diarrhœa came on, but without any blood in the discharges. She was now at the beginning of the third week of her illness, when she felt a very sharp pain in the left side of her chest; shortly after which her breathing became very much oppressed. She now began to cough. The op-

which alarmed him much. It was in Norfolk, where I had happened to be during the summer; the hemorrhage was very inconsiderable, but the sight of the blood frightened him. When I saw him his breath at once told me he had gangrene of the lung. The history of his case was this. He had been heated in cricketing, and stretched himself on the grass; in the evening he was seized with a rigor, and soon afterwards with pain in the side; his medical attendant saw him next day, and bled him, with relief, and gave him what his case seemed to require: it seemed to be one of pleuro-pneumonia, and was treated accordingly. He at first improved, but after some time he not only made no way, but even appeared to grow worse. It was when he had been ill a fortnight that he had hemoptysis, which made him send for me, as I happened to be nearer to him than his attending physician. After I had quieted his alarm about the hemoptysis, I waited till his physician arrived. I then noticed to him what he had not perceived, the fœtor of the breath, and of the sputa. He at length admitted its existence, and consented to an alteration in the treatment, upon which an amendment in the condition ensued, and a subsequent complete recovery. The education of the senses, as instruments of diagnosis, ought to be continually impressed upon the physician.



pression of her breathing continued to increase until she was admitted into the hospital. A week after this, a new phenomenon presented itself; the fetor of the breath and of the sputa convinced me of the existence of gangrene of the lung, but the amphoric resonance in the posterior left part of the chest, and the clear sound under the mamma, created a suspicion in my mind that a detached slough of the pleura had given rise to pneumothorax. In order to ascertain this, I made the patient alter her position, and allow me to examine her on her hands and knees. The alteration of position made no change in the phenomena, which continued *in statu quo*; nor did succussion indicate the presence of any fluid in the chest. My diagnosis was, that there was a gangrenous cavity in the lower part of the left lung. I attributed the resonance anteriorly to the stomach. There was but little variety in her symptoms from the time she came into hospital until her death, which occurred at the end of a week. She chiefly complained of the violence of the palpitations, and of rigors, which she had every night, and which were at times very violent; these rigors were sometimes followed by perspirations, and sometimes not. The pulse at the wrist was often so rapid that I found it impossible to count it. On one occasion, when I could not count it, I was able, by means of the stethoscope applied to the heart, to reckon 180 contractions of the ventricle in the minute. I remarked to the pupils, who accompanied me in my visit, that I had never before witnessed the same rapidity of pulse and quick (*vive*) action of the heart, quite obscuring its rhythm, except in cases of excessive hemorrhage, and of phlebitis dependent on the introduction of some poison into the blood. I had in view cases of phlebitis which I had known to have followed the operation of venesection performed with a dirty lancet. As there was no hemorrhage in the present case, I charged the peculiarity of the symptoms on the circulation being poisoned with putrid matter from the disorganized lung. I saw too plainly I had not much to expect from treatment. Still it was remarkable how wine seemed literally to bring her to life again; and of it she drank most freely. I also gave her pills composed of morphia and chloride of lime, the former ingredient to relieve the distressing irritation of the cough, and the latter to correct the fetor. I believe these pills were useful. She seemed to die from exhaustion. The examination of the body exhibited most interesting pathological appearances. The lower lobe of the left lung was completely disorganized; it was reduced to a dirty, blackish brown mass,—to that state which the French pathologists so aptly designate *putrilage*. In the centre of this mass was a jagged, uneven cavity, not lined by a distinct membrane, but bounded by sloughing pulmonary substance. This cavity extended upwards through the height of the lobe of the left lung, and downwards through an opening in the diaphragm, through which at least two fingers could pass, into an abscess of the spleen. This abscess, which contained a quantity of pus and a portion of the spleen, was lined by a regular, defined membrane. The portion of the spleen in

the abscess exhibited, partly on its surface, still covered with its capsule, the appearance of a withered shrivelled apple, while a considerable part of it was broken down and jagged from ulceration. To return to the lung, there were small depôts of purulent matter in the diseased portion of it, and many of its vessels were plugged up with lymph. The superior surface of the stomach was attached to the under surface of the anterior margin of the left lobe of the liver by bands of pasty lymph, into which thin purulent matter was infiltrated. It was in fact a specimen of diffuse inflammation. The liver was larger and paler than natural, and when a section was made from its anterior to its posterior margin, pus issued from the divided vessels. All the branches of the porta seemed to contain purulent matter. The splenic vein contained a dirty grumous coagulum, about an inch long, which could be easily detached from the sides of the vessel. Neither the lining membrane of this vein, nor of the porta, was either red or vascular, or softened in its structure. The heart was small. Its muscular structure, especially the left ventricle was in a state of the most rigid contraction, and its cavity almost entirely obliterated. I found no coagula in the right cavities of the organ, nor in the pulmonary artery. The only other morbid appearances that were discovered were a slight ulceration of the os uteri, and the cicatrices of old buboes in the groins (*Cerne cicatrices veneris vestigia priscae*).

I believe I am safe in asserting that the records of pathology do not present an exact parallel with the case just detailed, nor one exhibiting such a variety of interesting features. Its history leads me to believe that the mischief originally began in the abdomen. It is not easy to determine whether the substance of the spleen was first affected, and the inflammation extending from it to the peritoneum produced an abscess bounded by adhesions; or whether it was originally an inflammation of the peritoneum lining the diaphragm, in the neighbourhood of the spleen, ending in the formation of an abscess that involved a portion of the spleen. Although there is no organ in the animal body with whose pathology we are less acquainted than the spleen, yet it would perfectly consist with what we do know of the ordinary circumstances under which it becomes diseased, to believe that in the present case it was the first link in the morbid chain,—the *point de depart* of all the subsequent mischief. Of the physiological uses of the spleen we can scarcely pretend to have got beyond mere conjecture. Like every other organ whose functions have not been accurately determined, it has had many and various uses assigned to it. In fact, whenever a physiologist has been at a loss for an instrument for a function, he has applied to the spleen in his difficulty, and pressed it into his service. This much we know of this organ, it readily becomes the seat of congestion when the circulation in other organs is impeded. In cirrhosis of the liver, the congestion to which the spleen is subject, from the obstructed portal circulation, often ends in its permanent en-



largement; and not unfrequently I have been guided to the diagnosis of cirrhosis of the liver by the enlarged spleen, in the absence of everything else that could have led me to suspect the existence of this disease. We also know how often the spleen is enlarged in intermittent fevers, an effect which is ascribed to the repeated accumulation of blood in it during the cold stage, when this fluid leaves the cutaneous capillaries. We also are familiar with the pain in the left hypochondrium, of which the female, whose menstruation has been irregular, so often complains, and which she describes as a sense of fulness, and often compares to the feeling that would arise from a sponge dilating and pressing out the ribs. At such a time percussion in the splenic region yields an unusual extent of dulness, indicating the congestion of the organ. These facts, connected with the pathology of the spleen, will countenance the supposition that any cause suddenly checking the menstrual discharge, when present, would be very likely to determine to this organ, and perhaps produce inflammation, terminating in suppuration, if the condition of the constitution favoured such a termination. The subject of this case exhibited every indication of a scrofulous habit, further damaged by syphilis. The substance of the spleen was destroyed to a considerable extent, while what was left of it was very soft and diffuent. The other view that suggested itself was, that it was originally a circumscribed peritonitis, forming distinct loculi, which became so many abscesses, one of which happened to come in the way of the spleen, and contracted adhesions with it, and so embraced a portion of it as to enclose it within its cavity; that this cavity afterwards took on an ulcerative action which destroyed a portion of the enclosed spleen, while it also made its way up through the diaphragm, and so invaded the lung, and produced in it the disorganization that I have noticed. If it were not for the coagulum that was found in the splenic vein, so little appearance of inflammation did either the internal membrane of this vein, or of the porta and of its branches, exhibit, that I should have felt little hesitation in asserting that these vessels had but little, if any, share in the production of the pus, but that it was supplied by the splenic abscess and conveyed by them, as by so many conduit pipes, into the liver. I suppose I am to look upon this coagulum as what Cruveilhier calls the *sequestration* of veins, or, as a *nisus naturæ* to prevent the contaminated fluid circulating through the system. We find it more easy to explain how the purulent matter got into the liver than into the lung. It had but a short and direct passage from the splenic abscess to the former organ; whereas to reach the latter it must needs take a longer route, and pass through the heart, where we might have expected to have found some traces that it had left behind it *in transitu*, in the form of the polypi, or coagula containing pus, which are so often met with, especially in the right cavities, in cases like the present. It was in vain that we looked for these in the heart and in the larger branches of the pulmonary artery. It was only in the minute branches of the pulmonary vessels that we found coagula, and the purulent dépôts near them. Perhaps, then, it may be nearer the

truth to suppose that the matter had been generated in the pulmonary parenchyma,—that these depôts were not purulent in the first instance, but knots or coagula of blood which eventually suppurated. This is the most commonly admitted explanation of these purulent depôts, and one that derives a plausibility from the fact, that the pus-corpuscles are too large to permeate the walls of the pulmonary capillary vessels.

One of the most striking features of this very peculiar case was the free communication between the splenic abscess and the gangrenous lung, through the diaphragm. The late period at which the pain of the side, so soon followed by dyspnœa, came on, marked the time when the abscess penetrated the diaphragm. No doubt, before it had made its way into the thorax, some adhesion, which dissection discovered, had already formed between the base of the lung and the diaphragm, otherwise the matter would have escaped into the cavity of the pleura.

I think we can perceive in the difference of the splenic abscess and the sloughy condition of the lung, differences dependent not so much on the nature of the organs affected (although we do allow something for this difference), as upon the different states of the constitution at the different times when the two organs become affected. When the splenic abscess formed, the system was not yet contaminated with the pus which afterwards circulated through it; it was then more capable of healthy inflammation which was bounded by adhesions. When the lung became diseased, it was then infected, and had become incapable of any but the most unhealthy action. I also suspect that it was in the progress of the disease, and when the system had become damaged, that the diffuse inflammation between the stomach and liver occurred. The symptoms which were present from the time she came under my care plainly indicated the constitutional contamination; I allude to the rigors with which she was seized from time to time, and which have been observed so frequently in such cases as to cause them to be regarded as malignant intermittents. But what convinced me even more of the constitutional taint was the peculiarity of the pulse and of the heart's action, whose rapidity exceeded anything I had before witnessed, except in cases of fatal hemorrhage. I have already noticed the rigid muscular contraction of the left ventricle of the heart, and the almost complete obliteration of its cavity, which is the exact state in which these parts are found after fatal hemorrhage. It is not remarkable that there should be these points of agreement between hemorrhage and constitutional contamination. They both present their prominent symptoms in the disturbance they produce in the nervous system, caused in the one case by a failure of a due supply of blood, and in the other by the vitiated quality of the blood supplied to the parts.

I shall conclude my notice of this interesting case by a recapitulation of its prominent features:

1st. The affection of the spleen, whether we regard it as being primarily or secondarily engaged. In either case it adds to our know-



ledge of the pathology of an organ of which we know but little, and, therefore, should endeavour by all means to acquire every possible information about.

2nd. The gangrene of the lung, occurring under circumstances so novel as, I believe, to be without precedent in the history of this lesion.

3rd. The portal phlebitis, with its characteristic constitutional phenomena, exhibited chiefly in the rigors and the peculiar action of the heart.

4th. The purulent depôts in the lung, whether conveyed from a distance or generated in the pulmonary parenchyma.

5th. The diffuse inflammation of the peritoneum between the stomach and liver.

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## SELECTIONS FROM BRITISH AND FOREIGN PERIODICALS.

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### M. BLANCHARD'S *Formula for Pills of Iodide of Iron.*

THE following proportions are for 100 pills: Iodine, one drachm; iron filings, half a drachm; distilled water, two drachms; honey, four scruples; any absorbent powder, two drachms and a half. The water, the iodine, and the filings are to be introduced into a small glass flask; as soon as chemical action commences, the mixture is to be shaken briskly, and the resulting green fluid filtered into a little iron capsule, the weight of which has been previously ascertained. The flask and the filter are to be washed with two additional drachms of distilled water, mixed with a very small portion of the honey. Mix the liquors, add the remainder of the honey, and evaporate at first rapidly, and subsequently at a lower temperature, until the weight of the mixture be exactly equal to that of the iodide and the honey; that is, to about eight scruples. Add a sufficient quantity of powdered marshmallow root (or, what is better, of a mixture of equal parts of it and of powdered liquorice), about two drachms. Divide the mass into four equal parts, which are to be rubbed in powdered iron<sup>a</sup>. Roll the little masses into cylinders, on an iron pill machine, and divide each into twenty-five pills, which are to be rolled in a fresh quantity of powdered iron, in order to cover any portions of iodide which may have been deprived of their coating by the machine. Expose the pills to a moderately warm temperature, so that they may not attract moisture from the atmosphere, and proceed without delay to the second part of the process, which consists in covering them with a varnish, as follows:

Dissolve one part of balsam of Tolu in three of pure ether; pour some of this tincture into a little porcelain capsule containing the 100 pills, and rotate the capsule rapidly, so as to moisten the entire

<sup>a</sup> For preparing this, a formula is given in the last edition of the Dublin Pharmacopœia.

surface of the pills and promote the evaporation of the ether. Lastly, as soon as the pills begin to adhere, throw them on trays coated with mercury, taking care to separate such as may have united. Leave them for twenty-four hours in the open air, and finally dry them in a stove, at a temperature of from 68° to 77° F.

It will be found useful to give them a second coat of varnish. Each pill is composed, with other matters, of rather more than three-fourths of a grain of iodide of iron, and about one-seventh of a grain of pulverized iron adhering to the surface; the entire being covered with a layer of balsam of Tolu, weighing scarcely 0.046 grain, if single, or about twice as much, if double.—*Journal de Pharmacie et de Chimie*, October 1850, p. 252.

[This excellent form for the preparation of pills of the iodide of iron has been so highly approved by the French Academy of Medicine as, on the report of a committee of investigation, to have obtained the honour of being inserted in the *Bulletin*, and to be deemed worthy of special recommendation. It is remarkable for the simplicity and preciseness with which the details of the manipulation are described, and for the perfection of the process, as regards the complete preservation of the iodide of iron from undergoing decomposition.]

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*On the Action of the Golden Sulphuret of Antimony.* By Dr. BOECKER.

THE investigations contained in this essay of Dr. Boecker's have been conducted with the greatest care; the author having experimented on himself with the medicine, and having carefully examined the principal excretions before, during, and after its use. The examination of the urine, especially, furnished some interesting results. During the use of the golden sulphuret, the bowels acted regularly, once a day; but when the author omitted to take the medicine, he remained several days without a motion. Whenever the alvine evacuations were increased, the quantity of urine was diminished, particularly in its solid contents, as appears from numerous analyses which are recorded. An interesting circumstance is, that the quantity of urine and of solid excreted matters increased with the dose of the medicine, and *vice versa*. It is also worthy of observation, that the fixed salts in general, as well as the salts insoluble in water, were increased by its exhibition. On the whole, it would appear from the experiments that, during its use, a more rapid renovation takes place in all the organs and all the tissues. Another circumstance to be observed is the increase in the quantity of sulphuric acid in the urine, which was nearly double the ordinary amount, doubtless in consequence of the sulphur of the preparation being converted into the acid, which subsequently enters into the formation of the urinary sulphates. The author also details the results obtained from the examination of the pulmonary exhalation. During the use of the golden sulphuret the amount of carbonic acid was increased, while it gradually diminished on discontinuing the medicine. The quantity of watery vapour, on the contrary, underwent no change. As to its action on the blood, the author found



that it diminishes the amount of the solid constituents of that fluid. Blood drawn from a vein was at first black, but gradually became red when exposed to the air, and this change took place more rapidly than when the sulphuret was not exhibited. The microscopic examination of the blood showed that the nucleated globules visible in normal blood disappear during the use of the golden sulphuret.

To recapitulate: The golden sulphuret of antimony increases the secretion of urine and the exhalation of carbonic acid; it stimulates the intestinal and cutaneous excretions, as well as the secretions of the mucous membrane; and it thus hastens the metamorphosis of the system, an effect which is even to be detected in the blood itself.—*Archiv. für Physiologische Heilkunde.*

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*On the differential Diagnosis of the several Varieties of general Paralytic Affections, by means of Galvanism locally applied.* By A. BRIERRE DE BOISMONT.

THE general paralysis of the insane, so well described by MM. Bayle and Calmeil, appeared to have definitely taken its place in the nosological classification of diseases, when the labours of MM. Baillarger and Lunier, by establishing the position that general paralysis is an affection independent of disorders of the mind, raised the suspicion that it might exist alone, and that in cases of insanity it most frequently precedes the manifestation of mental derangement. While admitting that the general paralysis of the insane is properly divisible into two classes, one of which, more extensive and really characteristic, comprises paralytics with the delirium of ambition, inducing excessive self-esteem, the other, much more limited, includes paralytics with simple dementia; I have, with MM. Calmeil, Foville, Parchappe, Bayle, &c., maintained that the general paralysis of the insane did nevertheless, in its symptoms, its course, its causes, and its nature, as well as by the age and sex of the individuals it attacked, constitute a special disease. Being anxious to clear up this question, in concert with my friend Dr. Duchenne, of Boulogne, I undertook a series of researches on the subject, and I was soon convinced that it was involved in extreme confusion. One of the first results to which our experiments with galvanism applied locally conducted us was, that there are two kinds of general paralysis, differing completely in their nature and their seat.

The distinctive character of the first form of general progressive paralysis without mental derangement is, that it presents a weakening, diminution, or abolition of irritability, more decided in proportion to the duration of the disease. This alteration may begin in a muscle or limb; generally speaking, it is in the inferior extremities it first appears, and it afterwards invades successively all parts, and reaches even the tongue. In several cases the autopsy, though performed with the greatest care, revealed no morbid change either in the brain or spinal marrow, notwithstanding the long existence of the affection.

As an example of such cases I shall briefly mention the following. A lady finds herself losing power first in the left superior extremity, then in the inferior, and subsequently those of the opposite side become affected in the same order; the fingers become contracted, and she can with difficulty retain any object in her hands; her step is uncertain, and she can only walk with the assistance of another. The paralysis reaches the tongue, and the patient cannot pronounce her words without slowness and hesitation; her sensibility remains perfect, her intellect unimpaired; the disease has lasted more than a year. The digestive functions are perfect; she can retain the urine and fæces. The electrical apparatus causes no contraction in the lower limbs. The tibialis anticus, the peronæi, the flexors, remain motionless under the influence of the current. This phenomenon is observed in a somewhat less remarkable degree in the muscles of the upper extremities; the muscles of the trunk contract but feebly. To this case we might add that of a patient under the care of M. Andral, who died with all the symptoms of general progressive paralysis without mental derangement, which had lasted more than a year; in this patient irritability was completely annihilated, although he could still perform some movements. Consciousness continued unimpaired to the last. A careful post mortem examination, in the presence of M. Andral, revealed no change; and a microscopic inspection by M. Lebert showed only a fatty degeneration of some of the muscles of the thigh. The fibres of the muscles of the leg, in which irritability had been extinct, had undergone no alteration.

In reviewing these facts, and many other analogous ones, but which must be referred to different causes, we may consider it established that there exist cases of general progressive paralysis without impairment of the mind, which are characterized by the weakening, diminution, and destruction of irritability. It was interesting to compare with these results those furnished by the examination of the general progressive paralysis of the insane. M. Duchenne and I repeated, in September, 1849, our experiments on the paralytic patients placed in my lunatic asylum. The three individuals, who were the subjects of them, were paralytic in different degrees: the first had only intermittent stammering; the second was in the second stage, but considerably emaciated; the third, who had been for many years paralytic, could scarcely balance himself on his legs, and could not answer questions. In all, irritability existed in a remarkable degree.

We recommenced these experiments on the 15th of November, at the Bicêtre, in the presence of M. Delasiauve, physician to the hospital, and his pupils. Patients were taken at random from among the most seriously affected, those of longest standing, and those who had been for several months confined to bed; irritability was proved to exist in the six patients examined; two were in a state of extreme emaciation, and even atrophy, particularly in the inferior extremities; almost all these patients voided under them. We may therefore consider it as established that in general paralysis with mental alien-



ation, irritability is preserved. Doubtless, cases will occur in which these peculiarities will exist, although there have been as yet no signs of aberration; but we must not forget that in this disease three orders of symptoms occur; and that consequently sensation, and the power of motion alone may be affected, and intelligence continue unimpaired until long afterwards. M. Delasiauve mentioned to us a remarkable case of an individual who remained in the hospital for two years, presenting only the symptoms peculiar to general paralysis, afterwards the characteristic signs of madness appeared in twenty-four hours. Lastly, in paralysis of the insane, progressive paralysis connected with disease of the spinal marrow may occur.

As inferences from the preceding facts we may lay down that general paralysis occurs without as well as with mental derangement. This fact has been already pointed out by others.

The existence of general paralysis without the characteristic mental derangement described by authors, does not imply an alteration in the power of motion alone; for in all the cases which we have had an opportunity of observing, there were indications of insanity, or of defect of memory.

Even although the altered power of motion should be the only affection, it must be borne in mind that derangement of the intellect, of sensation, and of motion, may be manifested at unequal intervals. The absence of the exanthema in eruptive fevers does not change their nature.

As to the seat of general paralysis, we cannot admit that it must always be localized in the nervous centres. There are, according to our observation, some forms of general paralysis, which are dependent on the spinal marrow, others on the great sympathetic; some which are peripheral, many which are not connected with any appreciable lesion of the nervous centres; and a certain number which depend on diseases of the brain.

In fine, therefore, we may consider it is an established fact, that there exist two great classes of general paralysis, of which in one, that of insane paralytics, muscular irritability is preserved in all its degrees; while in the other, that of paralytics without mental derangement, both irritability and the power of motion diminish, grow feeble, and are lost in proportion as the functional disease advances.

The general progressive paralysis of the insane also presents two varieties: the first, by much the more frequent, is that which seizes individuals in the flower of their age, and the chief intellectual derangement of which is characterized by ambitious madness, or excessive self-esteem; the second, less frequent, attacks more especially individuals already advanced in life, although it is also observed in other adults, and presents the symptoms of dementia, and particularly weakness and loss of memory.

The seat of general paralysis ought not to be localized as it has hitherto been; this great functional derangement may depend upon very different lesions of the nervous system, all parts of which are, it seems to us, jointly and severally liable to be affected — *Annales Médico-Psychologiques*, October, 1850.

MEMOIR OF THE LATE JOHN C. DOUGLAS, M. D.<sup>a</sup>

It is with feelings of much regret that we record the death of this veteran obstetrician, who had been almost exclusively engaged in the practice of midwifery for nearly forty-three years. This event took place on the 20th November, 1850, in the seventy-third year of his age.

Of the names which are honourably identified with the Dublin School of Midwifery, that of Dr. Douglas will long hold a distinguished place. His essays upon the Spontaneous Evolution of the Fœtus, and on the Hour-glass Contraction of the Uterus, are in themselves sufficient to insure for him a lasting fame. We believe that few men have ever obtained so wide a reputation by so small an actual amount of literary production; and this is, perhaps, the best possible proof of the originality and merit possessed by his writings.

John Cuppage Douglas was the son of a medical practitioner in the town of Lurgan, county Armagh, where he was born on the 14th June, 1778. It being determined that he should follow his father's profession, he was sent to Dublin, to receive the necessary preliminary education; and in the month of June, 1800, he obtained the certificate of the Royal College of Surgeons of Ireland, qualifying him "to serve as surgeon to any regiment in His Majesty's service." To this document we find appended the names of Jebb (President), Rivers (Vice-President), M'Evoy, L'Estrange, and Piele (Censors). In the month of August, in the same year, he received the license of the Apothecaries' Hall, Dublin. On the 26th October of the following year (1801) he was appointed surgeon "to the Militia Regiment of Foot for the County Tipperary." How long he held this post is uncertain; but in February, 1803, he received the degree of M.D. from the University of St. Andrews, and in December, 1808, he was nominated assistant at the Lying-in Hospital, Dr. M'Cabe being his coadjutor, and Dr. Hopkins the master.

The transition from a military surgeon to a lady's doctor seems strange enough; but experience has fully shown that the one may not by any means disqualify a medical man for the other. Denman, as is generally known, was for many years a naval surgeon, and so was Dr. Granville. Dr. Henry Davies served for some time in the army; and, to come nearer home, the seven clasps attached to the peninsular medal of the present Master of the Lying-in Hospital<sup>b</sup>, sufficiently attest that he once occupied a position, as a military surgeon, not less prominent than he now does as an obstetrician.

It was in the wards of the Lying-in Hospital that Dr. Douglas

<sup>a</sup> We are indebted to our esteemed friend and contributor, Dr. Alfred H. M'Clintock, for this biographical record of the late Dr. Douglas, a physician whom we knew sufficiently well both to value his professional worth and to admire his private character. [ED.]

<sup>b</sup> Dr. Shekleton, from whom a valuable contribution to his department of the profession appeared in our last Number. [ED.]



first made the observation which led him to suspect the accuracy of Denman's views respecting the process of spontaneous evolution of the fœtus. Having matured his own ideas on this subject, he gave them to the world, in the year 1811, in the form of a small pamphlet of twenty pages, entitled "An Explanation of the Process of the Spontaneous Evolution of the Fœtus." The truth and originality of the great fact, which it was the special object of this brochure to promulgate, are now universally acknowledged; but it is to be regretted that the author did not confine himself simply to its announcement. From an exaggerated idea of the practical importance of his discovery, he hazarded some conjectures which incurred severe reprehension, and which would, doubtless, have consigned to oblivion any work of less real merit. Dr. Douglas very soon afterwards saw with pain the imprudence of these remarks, and in the subsequent editions of his pamphlet they were entirely omitted. This incident we mention, to serve as a wholesome caution to young authors against indulging in over-sanguine anticipations. Our allusion to it cannot detract from the value of an essay of which it has, with truth, been said, that, "along with Dr. Clarke's reports and papers, it laid the foundation of the high repute of Dublin as a school of midwifery." This pamphlet elicited a long private communication from the celebrated Dr. Denman to the author, part of which Dr. Douglas published in the preface to the second and third editions of his work. The tone and spirit which pervade the entire of this instructive letter are deserving of the highest praise, and convey the strongest and most pleasing evidence of a liberal and philosophic mind, free from every taint of prejudice, and solicitous only for the supremacy of truth. This notice of Dr. Douglas' publication, from a man of such deserved eminence, was indeed most flattering; and we feel it is but due to him, as well as to the writer of it, to give here an exact transcript of its contents, as the greater portion of it has not hitherto appeared in print. This we do the more readily, as we are convinced its perusal will afford no small gratification, apart even from the interest that must necessarily attach to it as the production of so illustrious a man. The passages of Dr. Douglas' original pamphlet, to which reference is made, are inserted in the notes.

"DEAR SIR,—I am much obliged by the favour you have done me in sending your pamphlet, explaining, with much ingenuity, the evolution of the fœtus, a subject of considerable importance in midwifery; and should sooner have made this acknowledgment, had I not availed myself of the opportunity, which the quietness of this great town gives me at this season, of going into the country.

"It would be very hard, indeed, if offence were taken at the difference of opinion which might be entertained of any published doctrine, as it would deny to others the privilege which all late authors assume, and every corrected edition of any work is an exercise of that privilege. For my own part, I am so far from taking offence by any freedom of criticism you have used, regarding what I had

written on the subject of the evolution, that I feel obliged by what you have said upon it in terms sufficiently flattering. On this ground I am sure you will excuse the few observations I have ventured to make on your work.

“When the first account of the possibility of the spontaneous evolution was published, it was absolutely denied by every member of a society to which I had the honour of belonging<sup>a</sup>; but in the course of a few years after the promulgation of the facts, so many cases had occurred in the practice of different gentlemen, that the fact was not admitted only, but became one of the established doctrines of the schools. It is a great pleasure to me to think that the fact was admitted, and when the account of it was published in a more orderly manner, I did not think it right to send it into the world without some attempt to explain how it was effected. In your practice I presume you have met with many instances of it, but it may be supposed that one case would not be esteemed sufficient authority for forming an axiom, and determining the general question. The fact is a distinct question; the manner of the evolution is another. For the former I am not any longer answerable; it stands on other testimony; but I certainly have remained responsible for the explanation of the manner, and to defend this I am not very solicitous: yet I may observe, that the explanation is not given in positive terms; beginning with ‘I presume,’ leaving it as an opinion for future proof or disapprobation. If there be an error in the explanation, others may also err in their opinion.

“In page 5, line 15, it is said, that, ‘each successive action brings the child’s shoulder lower and lower,’ which I do not recollect; and in the same paragraph, that ‘the same propelling power, instead of producing a continuance of the same effect, should, by some *miraculous effort*, cause another part of the child to descend,’ &c. Now, the word *miraculous* cannot be properly used in the description of a mechanical process; and, your first not being granted, the subsequent reasoning is done away. In a subsequent edition you will, perhaps, prefer ‘unexpected.’

“Page 6<sup>b</sup>, it is said to be inconsistent with reason; but we are speaking of the *fact*, and the acknowledged—no—*conjectural* effect of uterine contraction. The idea of a vacuum cannot be allowed to be a *just* but a *fanciful* representation, contrary to the laws of mechanical philosophy. Now, I have, myself, a *fanciful* idea of the manner in which the evolution of the body of the child is

<sup>a</sup> “The Society for the Advancement of Medical and Chirurgical Knowledge” is, we should suppose, the one here alluded to. [ED.]

<sup>b</sup> “Now it seems to me that it would be inconsistent with reason, and with the acknowledged effect of uterine contraction, to admit that the uterus, when acting so powerfully as to force down that part of the child which was at its fundus, should, at the same moment, leave a vacuum in the neighbourhood of the contraction, to which a descended portion of the child should recede, contrary to all the established laws of mechanical philosophy,” &c. Douglas, p. 7.



effected, by taking the ends of any flexible body (a piece of cane, for example), may be made to resemble the process; but not feeling myself sufficiently acquainted with mechanics, to enter into any controversy about the application of the principles of that science to the explanation of the processes of the human body, the powers of which are not fully understood by human beings, I have not been accustomed to allow more to mechanics than as affording us apt illustrations of certain effects produced by the powers of the human body. But when mechanical knowledge is brought forward, as has frequently been done, ostentatiously enough, as capable of fully explaining the processes of the human body, the imperfections of mechanics for such purposes are soon evident. I may further observe, that the mechanical knowledge of any writer, on the subject of midwifery, that I know, is not very deep or perfect. But, after a confession of my own dissatisfaction, or ignorance, we will drop this part of our subject.

“Page 7, line 7<sup>a</sup>. It has not, I believe, been *admitted*; and if it were, the admission would not amount to a proof. According to my observation, it seldom happens that the shoulder is propelled so low as you describe, that is, so low as that the shoulder shall press upon the perineum; if it did, I should not expect the evolution, but that the child was propelled, or would be propelled, in a doubled form, a thing not unfrequent in premature births, when the child is small, or capable of being much compressed, and being more readily admissive of such accommodating changes from its having been long dead. I wish you, therefore, to revise the whole of this paragraph.

“Page 9<sup>b</sup>. The question no longer remains, whether it be reasonable to expect that children undergoing the evolution should be born alive, without any subterfuge, or any reason for thinking the pelvis was unusually large, or the child uncommonly small. Line 12<sup>c</sup>. No doubt or misconception of the fact remains; it is the manner, &c., in which this *grand* operation of nature is performed; and you then come to the precise situation in which the fœtus is to be found, in different stages of the process, and immediately prior to its expulsion. Being persuaded that the same end is produced with considerable variation in the manner, I confess your description gives

<sup>a</sup> “It is admitted by every person who has been concerned in the management of labour, where this mode of parturition had been effected, that shortly before its occurrence the shoulder of the child had been forced so low into the pelvis, as to appear at the os externum; that the thorax had occupied a great portion of its cavity, and was so impacted in it as to render it impracticable for the hand to be passed up for the purpose of turning,” &c.—*Douglas*, p. 7.

<sup>b</sup> “It would be little less than absurd to expect a child to be born living after such a process; we may, however, admit the mere possibility of so desirable a termination, provided the pelvis be very large, the child rather small, and the pains so efficient as to complete the delivery in a short space of time.”—*Douglas*, p. 9.

<sup>c</sup> “To prevent any misconception of this grand operation of nature,” &c.—*Ibid*.

me the idea of your having taken it from a single case. The other part of your description has also the appearance of being conjectural, but I may be mistaken; but the whole of the description goes, in my mind, not to show the manner of evolving, but of doubling. In the succeeding paragraph the explanation is more minute. The position of the child, and other circumstances, I think, must necessarily vary, whether the anterior parts of the body offer to the back of the parent or otherwise. But, if the difference between evolving and doubling be preserved distinctly, the rest appears to be of less consequence.

“Page 11, line 7. I have no doubt of your description being correct in the case you describe; but if it be apprehended that there is some difference of manner in each case, we must have some difference in the manner in which each case is described, and a variety of opinions will be formed. Your manner will be contested among the rest, and not allowed, perhaps, to be more easily comprehended.

“In the three first cases which occurred to me, having no suspicion or expectation of the event, these were printed on a separate paper and given to the pupils, for their use, and the purpose of disseminating a knowledge of the fact. In those cases, I can assure you, that, finding it impossible, or judging it improper, to continue any attempt to turn the child while the pains were very strong, I desisted, waiting till these were abated. But the pains continuing, and the child descending, I expected the child would have been forced into the world in a doubled state; but in all the stated cases, the breech and inferior extremities were pushed before the other parts, and first expelled. But the fact, as I said before, was the only thing about which I was solicitous, and perhaps cared less about the description of the manner.

“Page 13, line 3<sup>a</sup>. The word ‘explanation’ would be full as proper as doctrine. Why is it said that in original presentations of the breech, the child is rarely protruded *so low*, when, *generally*, in such presentations, it is altogether expelled by the force of the pains, without any assistance?

“Page 14. The proof of fewer deaths happening in child-bed, and the preservation of more children, would decide the question of improvement in the art; for, if neither of these is actually the case, I should not give my assent. There are very frequent instances of death in child-bed in Plutarch, especially in the life of Pompey (as I recollect), and then, as now, more frequently among people of rank, in proportion to numbers. The first attempts to improve the art, especially with instruments, were, in my opinion, injurious, and so continued to the date of the forceps, which, when first brought

<sup>a</sup> “I have further to remark on this point, that if Dr. Denman and others, who have known this evolution to be effected, will allow that they have always found so much of the child expelled as I have described, it would amount to a confirmation of my doctrine; because it is well known that in original presentations of the breech, the child will rarely be protruded so low by the mere action of the uterus.”—*Douglas*, p. 13.



into use in this country, did much mischief. The tokens of real improvement in practice are, the almost total discarding of instruments of every kind. Much was done in the first instance by Ruysch, and very much afterwards by Dr. Hunter, who, I believe, never once used the forceps. The pomp of operations, and the immediate reputation attending the performance of them, did the mischief. Now, nobody's reputation stands on any other ground but his success, and, in fact, the public have no other mark by which to judge of abilities.

"I am still of opinion that the knowledge of the evolution leaves the business of turning children on the ground on which I have set; in presentations of the arm, turn, if you can, without the hazard of doing injury to the mother, and with a probable chance of preserving the child; otherwise, let it alone. But it would be a bad doctrine, in my opinion, to say, *never* turn children, 'because, by and by, they will—may—evolve.' It did, however, strike me, that such a construction might be put upon what you advanced in your work, and I persuade myself you will give this part of your subject full consideration; otherwise, you may eventually be the author of much mischief<sup>a</sup>. These are the observations which occur to me; and I must entreat you to pardon the repetitions and errors I may have committed. Will you allow me to consider this long letter as a proof of my respect for a gentleman who is taking pains for the improvement of his profession? There may be many opinions which require to be ascertained, and many practical rules which are not yet firmly ascertained. These, I hope, you will investigate, and set them in a more satisfactory point of view. Wishing you all success,

"I remain, dear Sir,

"Your most humble and obliged Servant,

"THOMAS DENMAN.

"*Mount-street, London, 10th October, 1811.*"

When we consider all the circumstances attending this letter,—the delicate and private way in which it was communicated, the relative position of the two men, and the object of Dr. Douglas' paper, which avowedly was to impugn the correctness of Dr. Denman's explanation of the process of evolution,—it must, we think, be confessed, that it tends most materially to exalt the character of its author, and to enhance his claims to our admiration and respect. Well would it be for medical science if her votaries would always exhibit the same forbearance and consideration towards each other, in their struggle for literary fame, and the same disinterested regard for the establishment of truth.

It should, perhaps, have been mentioned before, that in the

<sup>a</sup> The reader will perceive that these remarks have reference only to those passages in the first edition of Dr. Douglas's work, which were entirely expunged from the subsequent editions.

month of February, 1810, Dr. Douglas received the "*Testimonium*," or medical diploma, of Trinity College, Dublin,—a form of degree now abolished; and in the latter part of the same year he was admitted a licentiate of the King and Queen's College of Physicians in Ireland. Upon the expiration of his official connexion with the Lying-in Hospital, the thanks of the committee were conveyed to him in the following terms:—"That the thanks of this Board be given to Dr. Douglas for his extraordinary attention to the duties of his office during the time of his being Assistant to the Institution."

It has been told to us, on good authority, that, during the first year of his private practice, after leaving the hospital, he was so unfortunate as to meet with two cases of ruptured uterus, which so preyed upon his sensitive mind, that he had almost resolved to quit the profession if another case of the kind occurred to him.

Dr. Douglas' next appearance as an author was in the early part of the year 1820, when his "*Observations on the Hour-Glass Contraction of the Uterus*" were read at the College of Physicians of London, and afterwards published in the third volume of the Transactions of that body. It was mainly through the instrumentality of the late Dr. Gooch, that his communication got insertion in the pages of the College Transactions. That this was to be esteemed a considerable honour may be inferred from the very trying ordeal to which each paper was subjected. Dr. Gooch, in a letter to Dr. Douglas, thus describes it:—"When papers are offered to the College of Physicians, they have first to be read before the College assembled; they then have to circulate from house to house, among a certain number of the Fellows; they then have to be balloted for. Your paper has not gone through this tedious process; so that, even now, I cannot tell you whether or no it will be printed; but I have little doubt about it." (20th April, 1820).

In this short paper, the author's object was to establish two points, both of which were opposed to the doctrines then prevailing. The *first* was, that the hour-glass contraction of the uterus was rarely, if ever, a primary cause of retention of the after-birth, but merely secondary to morbid adhesion or to inertia, and was induced by the timid or ill-directed attempts of the practitioner to withdraw the placenta when detained by either of these causes. The *second* point was, that the stricture existed, not, as was then taught, in the middle of the uterus, but at the upper part of the cervix,—the os internum, as it is called. The testimony of subsequent observers has proved the general correctness of these two positions. In reference to the former, especially, we may be permitted to quote the words of an eminent living author, Professor Meigs, of Philadelphia:—"I have never seen an hour-glass contraction without adherence of the after-birth; and I take it for granted that, as soon as an hour-glass contraction is discovered, there is discovered along with it the indication to deliver, there being no reasonable hope that a spontaneous delivery will take place." And again he says:—



“ I cannot well conceive of an hour-glass contraction, independently of a preternatural adherence of the after-birth to the womb”<sup>a</sup>.

In the early part of the year 1820, Dr. Douglas received, in the form of a circular letter, a list of queries from the Board of Health, on the subject of puerperal fever. His replies to these interrogations, together with some additional observations on the disease in question, he afterwards published in the third volume of the Dublin Hospital Reports. This paper attracted much notice, as the author took a wider and more comprehensive view of the disease than most preceding or contemporary writers. He dwelt in particular upon the close resemblance subsisting between malignant or epidemic puerperal fever, and erysipelatous inflammation,—a point, we may remark, to which the attention of pathologists has of late been much directed. His classification of puerperal fever, Dr. Rigby has pronounced to be “ not only one of the earliest, but, in his opinion, one of the most correct,” and is the one adopted by this author in his *System of Midwifery*. Appended to this article is a short account of a very singular case of ruptured perineum, in which the fœtus was expelled through an enormous rent, “ partly comprised in the perineum laterally, partly in the left labium pudendi, but chiefly in the integuments of the thigh.”

These three papers constitute the sum of Dr. Douglas’ published writings, and from their acknowledged value, as well as their remarkable perspicuity of style, it must be regretted that he did not give to obstetric science some other contributions. But in this forbearance there is, perhaps, much cause for admiration. When a man begins to write, and is successful in his first attempts, how seldom is it that he knows when to stop; and anything good that may have come from his pen is often sadly diluted with much that is devoid of value or originality. Not so, however, with regard to the subject of the present memoir. He seems to have acted wisely, on the principle that, unless there is something of real importance to be communicated, it is better to refrain from writing; and for this he surely merits our approbation. Whilst resident in the Lying-in Hospital, and for some time afterwards, we believe, Dr. Douglas was in the habit of delivering courses of lectures upon midwifery and its allied subjects.

In the year 1822 Dr. Douglas was presented with a diploma constituting him an Honorary Fellow of the Medical Society of Philadelphia, of which body the celebrated Dr. Dewees was then President, than whom there could not have been any one more competent to judge of the merits of his writings, or to pronounce on his claims to this distinction. In 1829 he became a member of the Association of the King and Queen’s College of Physicians of Ireland; and he subsequently filled the offices of Vice-President and President of that Society. Lastly, in 1832, he was elected an Honorary Fellow of the King and Queen’s College of Physicians in Ireland.

<sup>a</sup> *Obstetrics: the Science and the Art.* Philadelphia : 1849.

Throughout a long series of years Dr. Douglas was engaged in extensive practice, as an accoucheur, in this city. His conduct towards his patients was always marked by extreme tenderness and consideration; and in his intercourse with his professional brethren he invariably acted up to the golden maxim, "do as you would be done by." It is not to be wondered at, therefore, that he should have entirely gained the esteem of the former and the respect of the latter. He corresponded occasionally with some of the most distinguished physicians and accoucheurs of the day. Amongst some papers which he gave the writer of this sketch a short time since, little anticipating the use that was so soon to be made of them, are to be found the originals of letters from Drs. M. Baillie, Denman, Dewees, Paul Dubois, Merriman, Burns, Gooch, Ingleby, H. Davies, Rigby, &c.

Dr. Douglas' death was occasioned by a sudden and unexpected apoplectic attack, which proved fatal in twelve hours.



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PART I.  
ORIGINAL COMMUNICATIONS.

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ART. VIII.—*On Secondary Hemorrhage after Parturition.* By  
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tant of the Dublin Lying-in Hospital, Vice-President of the  
Dublin Obstetrical Society, &c.

THE uterine hemorrhage of pregnancy, and that which occurs within the first hour or two after delivery, are familiar to all accoucheurs, and their causes and treatment are described in every systematic treatise upon midwifery: not so, however, that species of uterine hemorrhage which forms the subject of this paper. It has received little notice, and from only a very few authors; yet it has many claims upon our attention. It is not unfrequent; it may prove dangerous or fatal; the causes that determine its production are various, and consequently the indications of treatment are less plain and simple than in the other kinds of flooding connected with pregnancy or childbirth. Moreover, the circumstances under which it occurs are gene-

rally such as to take the practitioner by surprise, and to create considerable alarm in the minds of the patient and her friends. Coming on, too, as it usually does, very unexpectedly, and at a time when all parties are perhaps beginning to indulge a feeling of satisfaction at her happy escape from the perils of childbirth, an attack of this kind is very much calculated to disturb their composure, and prove a source of great anxiety.

The object of this paper is to present, with some regard to order, and as concisely as possible, the results of my own experience and researches on this complication of the puerperal state. Although I can lay claim to no originality in the following remarks, still I am not without hope that good may be effected by bringing this subject under the notice of accoucheurs in a distinct but comprehensive manner.

It may be well to state, that by the term "Secondary Hemorrhage" I understand any profuse sanguineous discharge from the vagina, commencing after a patient has been six hours delivered, and within a month from this epoch<sup>a</sup>. The denomination "Menorrhagia lochialis" is employed very much in this sense by some writers, especially by Dr. Burns. I think, however, it should not be thus generically used, but should rather be restricted to the prolonged continuance of *red* lochial discharge; a sort of hemorrhage, it is true, but materially differing in its nature and treatment from that to which this paper relates.

For some days after mature delivery, the uterus freely permits the escape of blood, unless the conditions normally existing to provide against such an occurrence be strictly complied with. These conditions, upon which so much depends, are, the degree of contraction in the uterine fibres, and the state of

<sup>a</sup> This definition is in accordance with the rule laid down by Madame Lachappelle: "Après l'accouchement, le nom d'hémorrhagie doit être réservé à toute perte plus considérable que ne doivent être les lochies, et moins distante de l'état de couches que ne doit être le premier retour de l'évacuation menstruelle."—*Pratique des Accouchemens*, t. ii. p. 375.



the circulation. So nicely poised is the balance between these agencies, that a very slight disturbance may suffice to produce hemorrhage. If, for instance, the uterus relax, or be arrested in its contraction, or if the blood rush with unusual force into its vessels, under the influence of general vascular excitement, or from a local determination, or "*molimen partiel*," as Madame Lachapelle terms it, then, in any of these cases, the barriers to the escape of the vital fluid are overcome, and hemorrhage ensues. Hence also it follows, that a degree of contraction capable of resisting the escape of blood when the circulation is tranquil, may, in an opposite state of the vascular system, prove wholly inadequate<sup>a</sup>. "Hemorrhage and a well-contracted uterus," says Dr. Ingleby, "are by no means incompatible." The great facility with which blood escapes from the uterus, especially at this period, is the most prominent feature in its pathology, and ought never be forgotten. Three circumstances in the vascular structure of the organ undoubtedly conduce to give to it this peculiarity. One is the extraordinary size and number of the uterine veins, or sinuses, as they are very appropriately designated; the second is, the tendency of these to open by lateral foramina on the internal surface of the organ; and the third, the complete absence of valves in the venous system of the uterus.

I shall now proceed to enumerate the various *causes* that may give rise to secondary hemorrhage. They are very numerous.

I. Perhaps one of the most frequent is the presence of a portion of placenta in the uterus. This is generally the result of artificial removal of the after-birth, especially if the operator is incautious or timid; but it may happen in the most skilful hands, where the cause of detention has been morbid adhesion

<sup>a</sup> This fact, supported alike by reason and experience, is noticed by most practical writers. Dr. Gooch erroneously thought that hemorrhage coming on under these circumstances was "a peculiar form," and as such described it in an essay, for which he has been severely, but not unjustly, criticised.

of a very intimate nature. Before the writings of White, Osborne, and Joseph Clarke had effected a reformation in the mode of conducting the second stage of labour, and whilst practitioners were guided by precepts and rules now happily exploded, manual extraction of the placenta was a common occurrence, and, as a natural consequence, the complication we are now considering was not by any means so unfrequent as in the present day.

The occurrence of secondary hemorrhage is often regarded as a sort of *primâ facie* imputation upon the accoucheur in attendance, implying some mismanagement of the third stage of labour, or some want of prudence in the subsequent treatment. The prevalence of such an opinion may, perhaps, account for the silence of authors upon the subject. Without attempting to deny that this event is occasionally the result of ignorance or rashness, still no one can affirm that it is always so, no more than it could be said of convulsions, of ruptured uterus, or of any of the other casualties incident to labour. Secondary hemorrhage, then, may, and very commonly does arise without a shadow of blame being attributable to the attendant; and of this we shall furnish abundant evidence further on.

When, unfortunately, a piece of placenta is retained in the uterus, it seldom produces any untoward symptom before the third or fourth day. If it is not cast off by this time, a train of symptoms usually develope themselves, which, viewed in the aggregate, will admit of an easy interpretation. To give any minute or lengthened detail of them would be here out of place; I must only refer the reader to the works of Charles White, John Clarke, Ingleby, and John Ramsbotham, by all of whom they have been fully and very accurately described. The following quotation from the last-named author gives, in a small compass, a tolerably correct picture of the ordinary course of events in these cases:—"For the first day or two the patient suffers little other inconvenience than that which arises from the loss of blood, and the more frequent and the more violent



returns of the after-pains. The secretion of milk is occasionally established; but the act of suckling produces an increase of uterine pain. These temporary returns of pain at length terminate in uneasiness of a more settled and more permanent description, which insensibly increases in degree, until it assumes the character of a continued tenderness of the uterine tumour, which is temporarily increased by the pressure of the hand. The uterine tumour is generally found well contracted. After the lapse of a few days, the local uterine irritation is transferred to the system, which is evinced in the accession of rigor, restlessness, watchfulness, anxiety, and the future progress of febrile symptoms. The pulse becomes at first quickened, afterwards hurried; the skin is dry and hot, especially on the belly; the face, though generally pallid, appears occasionally flushed, as if under the influence of hectic fever; respiration is quickened, and soon becomes laboured; the head is attacked with pain, which is continually upon the increase, until it ends with delirium; (sometimes the pain in the head is described to be of the pulsatory kind, resembling the tick of a clock); the appearance of the tongue is variable; sometimes it is dry, white, and furred; at others, it is dry and red; the eye at first assumes a glossy, and afterwards a languid appearance; the stomach is nauseated, and rejects the fluids taken into it, which are quickly altered in appearance and taste; and if the secretion of milk has been established, it gradually declines, until at length it disappears."

I cannot agree with Baudelocque, nor with a recent French author, M. Jacquemier, that hemorrhage is the most common accompanying phenomenon and the source of greatest danger in retention of the placenta. What is most to be feared, I think, in these cases, is the supervention of uterine or crural phlebitis. At the same time I must observe, that there are numerous instances on record of a fatal termination having ensued from hemorrhage alone; many such are contained in the writings of Lamotte, Perfect, White, Ashwell, Ingleby, Lee, &c. The hemorrhage rarely comes on sooner than the

fourth or fifth day, and it may not do so until the second week, or even later: in fact, so long as a fragment of placenta remains in the uterine cavity, the patient can have no security against a recurrence of the sanguineous discharge. Its retention operates probably in more ways than one to produce this result. First, it may occasion a partial and temporary inertia of the uterine fibres; secondly, it may, by its bulk, mechanically prevent the due and sufficient contraction of these fibres; and thirdly, it may cause a greater or less determination of blood to the organ. The last two causes, perhaps, are generally the most operative; but still the other should not be entirely excluded from a share in the production of the flooding; and an admission of its influence may help to explain the intermitting character of the hemorrhagic attacks.

The period at which the decaying fragment of placenta may come away, and thus put an end to the recurring discharges of blood, is exceedingly variable. Sometimes it is deferred until the third week, or even later. Dr. Ingleby is of opinion, "that the retained portion may become so far identified with the lining membrane of the uterus as to render a distinct and perfect disunion impracticable." He recites a case where "the hemorrhage began on the third day after delivery, and, with the exception of a few short intermissions, continued during a period of five weeks, when it terminated in death. On inspecting the body, a tumour of rather florid colour, and the size of the largest walnut, was found firmly adherent to the sides of the fundus uteri, at its highest part; the lining membrane covered the greater portion of the mass, though not its centre, which was ragged, and vessels could be traced opening upon it."

In the following case there can be little doubt that the "hard substance" was a retained portion of the placenta, enveloped in coagulated blood. "I was sent for to a woman," says Chapman, "who was seized with a flooding at the end of six weeks after her delivery. When I came to make a proper



inquiry, I found the womb open enough to receive three fingers, and a hard substance bearing down. There was some pain, or rather an endeavour in nature to cast out this superfluous guest; but it was not of itself sufficient, and the woman must undoubtedly have flooded to death, without the assistance of the hand. By stretching out my fingers far asunder, I dilated the mouth of the womb much more than at first I found it, and then brought away a firm fleshy substance, in the form of a turkey's egg, and nearly of the same bigness. The woman was very weak, but by proper management she recovered." In the very next paragraph he informs us, that he "could give many instances of this kind;" so that he evidently did not regard it as a singular or uncommon case.

The following case I saw in the autumn of 1846, in consultation with a practitioner of this city. The patient, a stout healthy woman, was the wife of a butcher living in the neighbourhood of the Castle-market, and had been confined of her sixth child, seven days before my visit. The history I got was as follows: the child had presented with the feet, hemorrhage took place soon after its birth, and on introducing the hand for the placenta, this was found so intimately adherent to the uterus, as to render its removal difficult and incomplete, some portions remaining behind. She went on, however, most satisfactorily until the fifth day, when she had a sudden and profuse dash of hemorrhage, which recurred again and again at intervals. At the time of my visit (for I only saw her once), she was much blanched and nearly pulseless, but no discharge of blood was then going on. Late on the afternoon of the ninth day, there having been some loss in the interval, the hemorrhage broke out afresh with great violence, and before assistance could be obtained, she was a corpse. In this instance it is remarkable that the hemorrhage was the only untoward effect of the retention, no fever or local irritation having been induced by it. At the time of my seeing her she had a plentiful secretion of milk. I he-

sitate not to say, that this woman's life might have been saved by the timely use of the plug.

II. The retention of a coagulum of any size in the uterus, beyond the first few hours after delivery, is not apt to take place, as a very moderate degree of uterine action would be sufficient to expel it, or to prevent its formation. Should it occur, however,—and experience shows that it may,—there will be constant risk of hemorrhage so long as it remains in the uterine cavity. The immediate or exciting cause of the effusion in these cases is probably some accidental displacement of the clot, or excitement of the arterial system. A woman “had frequent discharges of blood from the uterus for the first *ten* days after delivery, until at length, the hemorrhage becoming profuse, and her strength much reduced, the hand was passed into the vagina, and the fingers introduced into the uterus, by which means some coagula were removed, and the discharge ceased.”—(Collins.) A fatal case of secondary hemorrhage on the eighth day, apparently from retained clots, occurred in the practice of Madame Lachapelle. It was the patient's first accouchement, and she gave birth to twins. Immediately on the expulsion of the two-lobed placenta flooding took place in such excessive quantity, as to place her life in great danger for some hours. Notwithstanding this she progressed favourably until the eighth day, when, in attempting to get up, the hemorrhage recurred, and along with it there came away two fetid clots, which Madame Lachapelle considers were the cause of this fresh accession of bleeding. It was only by the liberal use of cold wet cloths, and injections of cold water, that the discharge was checked, but not before the vital powers had sustained a shock from which they could not recover. She died in the course of a few hours.

Dr. Burns remarks, that where the restoration of the uterus to the unimpregnated state does not go on regularly, “the cavity may be filled with blood, which forms a coagulum, and is expelled with fluid discharge. The womb,” he continues,



“ may remain thus stationary for a considerable time, and the coagula be successively expelled, with slight pains, and no small degree of hemorrhage. These symptoms very much resemble those produced by the retention of part of the placenta, and cannot easily be, with certainty, distinguished from them. We have, however, less of the fetid smell, and we never observe any shreds, or portion of the placenta, to be expelled, whilst the coagulum, if entire, has exactly the shape of the uterine cavity.”

III. There are some considerations which favour the supposition that, on rare occasions, secondary hemorrhage is the consequence solely of relaxation of the uterine fibres. This is a point on which we can hardly hope to obtain direct evidence, and in the absence of such we must take collateral proof. Thus experience shows that, for several days after parturition, the uterus occasionally admits of distention to a great extent, and this too under a degree of force which cannot be considerable. Ashwell once found the uterus to measure twelve inches, in a patient who died of uterine hemorrhage on the eleventh day from her confinement. I myself have recorded a case, in which the uterus on the seventh day became distended from internal hemorrhage, so that the fundus reached midway between the pubis and umbilicus. Ingleby details an instance in which, so late as the nineteenth day after delivery, the womb was emptied of a large quantity of putrid blood. Dr. Collins narrates a case where the introduction of the hand into the uterus was practised on the fourth day after parturition, for the suppression of hemorrhage; and the late Dr. Hamilton, of Edinburgh, used to relate, in his lectures, a case of a woman who was seized, five hours after a natural labour, with flooding, in consequence of relaxation of the uterus, induced, as he believed, by the influence of tobacco, which she very imprudently had smoked.

From the numerous and strongly marked sympathies of the uterus, it is reasonable to conclude, that for some days, at all

events, after parturition there may be an interruption of its contractile function, through the influence of deep mental impressions, or certain bodily derangements. Thus Perfect tells us of a lady, who some weeks after delivery was seized with a violent flooding, caused, he says, "by waking in a hurry from a frightful dream." Though the cases may be very few in which secondary hemorrhage results from simple relaxation of the uterus, still it can barely admit of question, but that this is often an efficient co-operative cause in producing or keeping up the sanguineous flux. In the case I am about to quote from Dr. Collins' Report, it would almost seem that the outbreak of hemorrhage was solely due to uterine inertia. "This woman had considerable hemorrhage on the fourth day, which had continued, more or less, for three hours before we were called. The uterus was distended, but contracted under firm pressure, and the discharge subsided. In less than an hour it returned, when the hand was passed, some clots removed, and cold applied, which arrested the discharge; an opiate was then given. In seven hours she had a third attack, when the hand was again introduced, on which the uterus contracted; firm pressure was made over this organ, another opiate was given, when she fell asleep and had no return."

IV. In a very large proportion of the cases of secondary hemorrhage, it will be found, when we come to inquire into the cause of the attack, that the state of the circulation plays a more or less important part. This, indeed, must be apparent on the most superficial reflection. To a local or general disturbance of the vascular system may be referred all those instances of effusion brought on by premature exertion on the part of the patient, by the incautious use of stimulants, by agitation of mind, local determination of blood<sup>a</sup>, or in fact by whatever tends to increase the force of the vital current.

<sup>a</sup> Among the out-patients of the Lying-in Hospital I have known secondary hemorrhage, brought on apparently by sexual intercourse too soon after delivery.



As we possess no means of measuring the degree of uterine contraction, so we can never tell beforehand what amount of vascular disturbance may be borne without the escape of blood from the uterine surface. Should the process of restoration in the uterus be interrupted, or not go on regularly, the vessels, which are still large, will be very apt to effuse their contents under any comparatively trivial excitement of the circulation. A knowledge of this fact points out an additional reason for enjoining strict rest and the horizontal position where the womb remains unusually large at a late period after delivery.

Cases of secondary hemorrhage arising from this cause are not very uncommon. I shall therefore give only one or two examples of it. The first is recorded by Dr. Ferguson, of New York. "The patient was twenty-four years of age, and had never borne children. Her labour was comparatively an easy one, of fifteen hours' duration, and no unusual symptoms presented themselves during her convalescence, till the day above mentioned (thirteenth). For three or four days previous she had left her bed during a good portion of the day, and as the presence of the binder was unpleasant to her, she had removed it without my direction or knowledge. On the morning of the thirteenth day I was suddenly called to see her, and found her very much prostrated from loss of blood. I learned from her that during three hours blood had been escaping from the vagina, but she had avoided communicating the fact to any one, in the hope that the hemorrhage would cease spontaneously. The exact quantity of blood could not be accurately ascertained; all the clothing in the immediate neighbourhood of the nates was saturated with blood, and large clots were lying below the vulva, from which I judged that the quantity lost was not far from two pints and a half. The discharge had continued to increase since its commencement, and when I saw her it was still escaping quite rapidly. Her countenance was pale and anxious, and her pulse at the wrist exceedingly weak and frequent, it being 110 per minute. Upon examination

over the hypogastric region, the uterus was distinctly felt considerably larger and softer than is usual at this period, a circumstance which I attributed partially to the early removal of the binder, and partially to the probable existence of an internal hemorrhage previous to the discharge of the blood from the vagina. Upon introducing a finger into the vagina, I found a clot lying in its cavity, and the os uteri sufficiently dilated to admit its extremity for a short distance. I immediately ordered a cold douche, followed by the application of a bladder of ice over the lower part of the abdomen, administered one drachm of the saturated tincture of ergot, and enjoined absolute quiet in the recumbent position, and cold drinks. The effect of these agents was to produce a moderate contraction of the uterus, though the discharge of blood was not very materially diminished, I now made a re-application of the binder, with a thick compress over the region of the uterus, as firmly as could be borne by the patient, and ordered the administration, every second hour, of the following pill:—Ergot of rye, three grains; acetate of lead, two grains; powdered opium, a fourth of a grain; and mucilage, a sufficiency." Under this treatment she gradually improved. On the evening of the following day it was deemed necessary to free the bowels; to accomplish which a cold water enema was used. Commenting on this case Dr. Ferguson observes: "In this instance I think the hemorrhage is fairly attributable to the early removal of the binder, accompanied by premature exertion on the part of the patient, causing a great excitement of the circulation."

Not many months ago a lady asked me to prescribe for her children's maid, who had been confined in the Lying-in-Hospital twelve days previously, and was attacked with profuse flooding, which recurred on three successive evenings. This was clearly brought on by over-exertion too soon after delivery, and was perfectly cured by rest and the administration of the ergot of rye. Her labour had been extremely rapid, but was followed by very considerable hemorrhage after the expulsion of the pla-



centa. Curious enough, the lady herself, a very slight, delicate person, was near losing her life by an attack of secondary hemorrhage, after a confinement which she had four years ago in Hampshire. The flooding occurred on the *first* day of her rising from bed, though it was the *tenth* from her accouchement. Just before the attack she had suckled the infant, and from the state of her nipples had been put to more than ordinary torture; feeling exhausted, the nurse gave her some brandy and gruel, whereupon a gush of blood took place from the vagina. This was at noon: twelve hours afterwards the hemorrhage recurred with greater violence, deluging all the bed-clothes, and even penetrating through the mattress, so as to form a pool on the floor. She had to give up nursing, and did not recover from the effects of this loss for many weeks.

V. Moreau mentions cases that occurred in his own practice, where secondary hemorrhage (in one patient eight days subsequently to labour) to an alarming extent seemed to be the result of obstinate confinement of the bowels, with great faecal accumulation in the lower part of the large intestine. So indurated was the excrementitious mass that enemata were of no avail whatsoever, and he had to effect its removal by means of the handle of a spoon, "*faisant l'office de curette*," as he expresses it. As soon as this was accomplished the discharge of blood ceased. Cases of this kind are not likely to be met with here, in consequence of the very general practice of giving purgative medicines to women in childbed.

VI. Dr. Ayre, in his "*Practical Observations on the Disorders of the Liver*," assures us that he has known this form of uterine hemorrhage to have been produced by functional disorder of the liver, and to have been suppressed by the administration of calomel. "That the uterine hemorrhage," he writes, "thus occurring during the first two or three weeks after delivery, is generally a symptom only of this functional disturbance of the liver, has not, I believe, been hitherto suspected: that it is, however, to be so regarded I can venture to

pronounce, from repeated observations made upon the disorder, and upon the means that are most efficient for its removal. It is now some years since I was first struck with the power which calomel purges appeared to possess in relieving uterine hemorrhage, as met with in the women belonging to the Lying-in Charity, for whom they were prescribed, simply with a view to their purgative effects. At first I ascribed the effect of the purge in relieving the hemorrhage to the evacuation of morbid matters from the bowels; but further and more accurate observations of the colour and condition of the stools, of the course of the disorder, and effects of the remedy, convinced me that the mere removal of the fæculent matters from the intestinal canal, though a proper, was nevertheless only a subordinate object, and in cases of excessive uterine hemorrhage was utterly unavailing; for, independently of other considerations which militate against that conclusion, a uterine hemorrhage will often come on after the brisk operation of the purge, and even where a spontaneous diarrhœa has for some time existed; and it will cease under the use of calomel alone or combined with opium, when the effect is simply to change the morbid actions of the liver and other organs of digestion, and in that way correct the unhealthy condition of the stools, and abate the frequency of their discharge. The cause, in fact, consists in a sudden interruption of the secretory function of the liver, which gives rise, in an aggravated degree, to an abdominal venous congestion, in which the uterus may, perhaps, participate; and the indication of cure for the hemorrhage, as well as other symptoms, will be found to be answered fully by restoring the biliary secretion. And as the danger in all these cases is imminent, it is of the utmost importance to be prompt in the use of those means which are suited to this end." After pointing out the caution to be used in the administration of diffusible stimuli, and giving some other general directions, he continues: "Calomel is the medicine which must be mainly relied on, and it must be given in small but frequently renewed



doses, following them up by aperients, or combining them with minute doses of opium where a diarrhœa is present, and continuing them until some impression be made upon the complaint, even at the risk of slightly affecting the mouth. By such means, indeed, I have had the satisfaction to save several women, whose condition to the attendants appeared hopeless: and it is under the full experience and assurance of their efficiency that I venture thus in the most unqualified manner to recommend them."

These observations from so high an authority deserve attention. Without wishing to lessen their value as a simple record of experience, I may still be allowed to say that I feel a difficulty in understanding how any functional disorder of the liver could so affect the uterus as to induce flooding. There is no particular sympathy between the two organs, neither does any of the blood from the uterus enter the portal system. The calomel, if it aid at all in the suppression of the hemorrhage, would appear to do so chiefly in virtue of its purgative qualities. In Moreau's cases, on the contrary, a rational explanation may be given, to account for the discharge, as there exists a direct and well-marked sympathy between the womb and large intestine; witness, for example, the good effects of cathartics and enemata in labour; moreover, the anatomical disposition of the rectum and left iliac vein is such that any inordinate distention of the former might impede the return of blood from the uterus, and it must be borne in mind that these hemorrhages are chiefly venous. These objections to Dr. Ayre's opinions are founded solely on physiological considerations, and I put them forward merely as such, leaving it for future observers to determine whether his theory or his experience is entitled to more respect in this matter. On the other hand, we learn from Dr. Watson that Dr. Latham's experience has led him to trust much to mercury, given to the extent of inducing salivation, in obstinate epistaxis. The same author also states that Dr. Southey relies upon mercury "as almost a spe-

cific remedy for obstinate hemorrhage occurring under similar conditions, from whatever organ of the body it may proceed." These remarks to a certain extent corroborate the practice of Dr. Ayre; and it may be in virtue of this antihemorrhagic property of the mercury that it acted so beneficially in his cases of secondary hemorrhage. Dr. Ayre himself says that the calomel must frequently be administered so as "slightly to affect the mouth." These are facts of much significance, and justly claim our deepest attention.

The following case is given by Dr. Ayre: "A case of the most alarming kind fell under my care some months ago, along with my friends, Messrs. Saner and Sleight, gentlemen of considerable practice of this place. The hemorrhage came on about three weeks after delivery, and was most profuse; the complexion of the patient was sallow and death-like; the stools had the colour of coffee-grounds, and very fetid; the mind timid and highly excitable, and occasionally indistinct; she frequently fainted as she laid in bed, and impatiently demanded to be fanned, and to have cold drink. Our treatment was directed exclusively to the correction of the congestive state of the liver, by restoring the biliary secretion, and we gave calomel in small doses frequently renewed. The hemorrhage became inconsiderable, and the other symptoms were much less urgent after some doses of that medicine had been taken; but it was not until after two or three weeks had elapsed, and when the mouth had become slightly sore, that the biliary secretion was fully restored, and that the lady could be considered as convalescent."

VII. According to Dr. Bennett, "the most prominent of all the symptoms occasioned by the presence of inflammatory ulceration of the cervix, during the puerperal state and after abortion, is hemorrhage. Under ordinary circumstances the sanguinolent discharge which follows parturition soon becomes modified, and ceases in the course of a few days, being replaced by the ordinary lochial secretion. When there is ul-



ceration the flow of blood often continues, in greater or less quantity, for three, four, six, eight, or more weeks. The blood thus excreted may be pure, or it may be mixed with muco-pus. This hemorrhage generally resists the action of all the usual anti-hemorrhagic remedies, its continuance frequently producing excessive debility and anemia." He further remarks: "I have no hesitation in saying that when hemorrhage continues after parturition for weeks beyond the usual time, there will *nearly always* be found some inflammatory and ulcerative lesion of the cervix, and that an instrumental examination is indispensable. Once the real nature of the disease is ascertained, the hemorrhage may, generally speaking, be immediately stopped by the cauterization of the ulcerated surface, from which it seems in these cases principally to proceed."

These truly practical observations would appear less applicable to secondary hemorrhage, properly so called, than to those cases of profuse or long-continued lochial discharge to which alone the term "*menorrhagia lochialis*" should, I think, be restricted. But, even with the utmost latitude in the interpretation of the cases here spoken of, there may still perhaps be some allowance made for exaggeration as to their frequency. Dr. Bennett himself tells us that "*inflammatory ulceration of the cervix uteri during pregnancy is of frequent occurrence,*" which can hardly be said of lochial menorrhagia. As, however, I have seldom deemed it necessary to use the speculum in the latter months of gestation, or during the puerperal state, I cannot offer any positive opinion derived from my own experience in this matter; though I have strong reason to believe that many patients affected with chronic inflammation and ulceration of the os uteri have been delivered under my care, who, nevertheless, had no subsequent attack of hemorrhage or extraordinary amount of lochial discharge.

It occasionally happens, especially in first labours, that the os uteri is slightly fissured by the passage of the child. Now it seems not unlikely that this tear might put on an ulcerous

character, and prove the source of hemorrhage during the puerperal state, under any disturbance of the uterine circulation. This remark I put forward more in the way of a suggestion than as an ascertained fact.

VIII. Secondary hemorrhage has on many occasions been caused by the presence of a polypus attached to the uterus. That a growth of this kind should be capable of producing such a result is intelligible enough. There is a fact, however, of great importance, relating to these cases, which we might not be just so well prepared for, namely, that the polypus may for the first time give evidence of its existence soon after delivery. Denman makes allusion to this, and Dr. Montgomery, in a paper read before the Obstetrical Society, and subsequently published in this Journal, expressly states, "that a polypus, even of large size, may make its appearance for the first time immediately after delivery, no suspicion having been previously entertained of its existence." Cases of polypus complicating parturition, or first appearing after delivery, in the way just mentioned, are recorded by Van Doeveren, Pugh, Smellie, Denman, Fordham, Chaussier, Lee, Ferguson, John Ramsbotham, Francis Ramsbotham, Macfarlane, Merriman, Gooch, Levret, Deguise, Boivin and Duges, Dubois, Ingleby, Crisp, Radford, Davis, Jacquemier, Beatty, Churchill, Montgomery, and many others whose names it would be superfluous to mention.

In the class of cases I am at present considering, the production of the hemorrhage has been ascribed to the polypus impeding the due and perfect contraction of the uterine fibres. But, Dr. Oldham combats this notion, and very shrewdly observes: "This explanation does not accord with the fact of the hard and contracted state of the uterus as felt above the pubis, and with the cessation of the bleeding when the tumour is tied, although left in the womb exerting the same mechanical action as before. It would obviously be superfluous to treat a polypus of this kind by ligature only, leaving the same absolute bulk of growth within the womb, if the bleeding was invariably and



solely caused in this way." Dr. Churchill has published two very interesting cases where profuse flooding after delivery was apparently referable to the presence of a polypoid growth. In one of them the hemorrhage commenced with the birth of the child, and only ended with the life of the patient fifteen hours afterwards. In the other case, of which I give an abstract, the hemorrhage did not begin until some time after delivery. A strong, healthy woman was confined of her second child after a short and easy labour. Fourteen days subsequently she was attacked with excessive hemorrhage, which occurred three or four times in the space of a few days, reducing her vital powers to a very low ebb. On examination per vaginam a smooth, round tumour was found just protruding through the open os uteri. It felt soft and spongy, and the finger could be passed round it, but not sufficiently high to ascertain its insertion. Its size appeared to be about that of the larger end of a hen's egg. Under the use of the plug and other means the discharge ceased, and the uterus, gradually contracting, enclosed the polypus, so that it could no longer be felt, and the os uteri resumed its natural state.

Dr. Hamilton "witnessed upon one occasion a case of fatal uterine hemorrhage three weeks after delivery, where the only apparent cause was a polypous excrescence, not larger than a horse bean, situated upon the internal posterior surface of the uterus, about three inches above the orifice." Dr. Johnson was once present at the *post mortem* examination of a woman who had died of flooding after parturition, and in the uterus was found a large polypus, growing by so slender a pedicle that the slightest twist might have severed it, and thus perhaps have saved the patient's life. The following history was communicated to Dr. Oldham by Dr. Radford: "I was requested by Dr. ——— to visit Mrs. H., residing about seven miles from Manchester, whom he had attended for some days, with a general practitioner of the highest respectability. She had been delivered a fortnight, after a natural labour. The dis-

charge afterwards became more profuse, and continued during the above-mentioned period, and frequently occurred in gushes. Paroxysms of violent uterine pains, attended by bearing-down sensations, greatly harassed her. The attentions of Mr. ——— were unremitting, and he always found the uterus contracted. His treatment was directed to mitigate constitutional symptoms, and subdue local pain, and also to maintain and support the tonic contraction of the uterus.

“No benefit was derived from the various remedies he made use of, but the vital powers continued to decline, and when I saw her I found her *in articulo mortis*; indeed she died in two or three hours afterwards.” At the *post mortem* examination there existed “no appreciable disease in any other organ except the uterus, in which was found a polypus of an oblong shape, about two inches in length, and attached to the anterior part of the body; its depending part was two inches in circumference, and its upper or neck about an inch and a half. That portion of the uterus in the vicinity of its connexion was dragged downwards and inwards.” It is almost superfluous to remark that in cases of this kind nothing short of a vaginal examination can reveal the true cause of the hemorrhage.

IX. Inversion of the uterus has long been recognised as a cause of hemorrhage *post partum*. “I feel strong reasons,” says Mr. Crosse, “for believing, as has been repeatedly stated by authors of high reputation and great experience, besides those already quoted, that partial inversion exists more often than is generally suspected, and is the cause of hemorrhage after the delivery of the after-birth.” The loss so produced ordinarily takes place immediately upon the removal of the placenta, this being almost invariably the time at which the displacement occurs; but it may be repeated at uncertain intervals subsequently, if the malposition be not rectified. Thus Mr. Crosse observes: “The hemorrhage may continue for hours, or first show itself in a considerable degree when several hours,



or even a day or two, have elapsed." Cases are not wanting which sufficiently prove that the inversion may escape detection at its first occurrence, the accompanying symptoms not being decidedly marked. Professor Desormeaux reports, that "he was consulted for the case of a woman in whom there was an incomplete inversion which was not detected until twenty-one days after the child-birth." Dr. Meigs adds: "I have seen a case in this city in which the occurrence was not verified until thirty days after labour, and another in which eighteen months elapsed before the fact was ascertained." Dailliez mentions a case where the displacement was first discovered six months after it happened; Mauriceau, one at eight months; and two so late as at nine months fell under the knowledge of the late Dr. Ingleby.

Again it is supposed that the womb may spontaneously become inverted some days after parturition. On this point M. Colombat writes: "Notwithstanding inversion of the womb would appear, in a manner, to be impossible subsequent to the escape of the fœtus from its cavity, which is the period when the viscus is most expanded and most flexible, both Ané and Baudelocque bear witness to its having occurred upon the third day, and Le Blanc on the tenth day after delivery." This is an occurrence of extreme rarity. In fact the bare possibility of its happening, except as the effect of a polypus, would seem to be scarcely admissible; nor do I think the explanation offered by Dr. Burns much more satisfactory. He supposes that a partial displacement had in every instance previously existed, the change from which into a complete inversion occasioned the sudden development of symptoms leading to the discovery of the true state of the womb. Without entering further into these disputed points, suffice it for our present purpose to know that partial or complete inversion of the uterus is one, however uncommon, of the many causes of secondary hemorrhage; and that a knowledge of this fact furnishes us with an additional reason for instituting a vaginal examination in all these cases.

I have now recited, though very imperfectly I fear, what may be considered as the ordinary causes of secondary hemorrhage after parturition. In the category may be included an immense majority of all the examples of this accident which occur. Here, however, as in every other field of medical observation, anomalous cases occasionally come before us, which cannot be reduced to any kind of order or systematic arrangement. Some of these heterogeneous cases I shall now relate, and though it may fall to the lot of few to witness similar instances, still they should not on this account be passed over unnoticed. Viewed simply as curiosities of medical experience, they will be read with interest; and as objects of pathological inquiry they become invested with real importance. The following collection of cases might, doubtless, be considerably augmented; but this would have required a closer and more extensive research than I was able to make throughout the records of midwifery.

For the following history I am indebted to the kindness of my esteemed friend, Dr. Churchill, who was called into consultation in the course of the case. A lady had been safely delivered, under the care of Mr. Speedy, of a living child, after a natural and easy labour, without more discharge than ordinary. She recovered apparently, so that her attendant discontinued his visits; but about three weeks or a month after her confinement she was attacked with uterine hemorrhage to a considerable amount, which returned in less quantity, and continued, with occasional intervals of a day or two, until her death, which took place about a month afterwards. On examination all the organs were found to be healthy, except the uterus. At its fundus there existed a vascular growth, like an erectile tumour and about the size of a hen's egg, projecting into the cavity, and occupying the thickness of the uterine parietes in this situation. It was spongy, soft, and could not be enucleated. The entire uterine substance was displaced or absorbed at that part.

A case in many respects similar to this, and one too of se-



condary hemorrhage, is recorded by Professor Kilian of Bonn. I shall give it as translated in the British and Foreign Medical Review: "A. B., twenty-four years old, strong and well made, was admitted, in an advanced stage of pregnancy, into the lying-in hospital at Bonn. She was then extremely healthy, and did not remember to have ever suffered from illness. The menses made their first appearance in her fourteenth year, and afterwards regularly every three weeks. She had menstruated once during her pregnancy. At the expiration of her time she was delivered of a boy. Half an hour after delivery the placenta came away, almost without assistance. At that time she was so well that her medical attendant joked her on a presentiment of the fatal termination of her accouchement, which she had frequently manifested, and which she, notwithstanding, still continued to nourish. The first three days subsequent to her delivery passed off without any symptom of disease. The secretions were healthy and the general state of the patient highly satisfactory; but, during the afternoon of the fourth day, Dr. Kilian was sent for in great haste to see the patient, who was described to be swimming in her blood.

"About two o'clock, whilst suckling her infant, she had exclaimed that she felt something boiling hot flowing between her legs, and immediately fainted. Before the nurse and house surgeon could come to her assistance, the hemorrhage had ceased. When Dr. Kilian arrived she had in a great measure recovered from the fainting fit into which the sudden loss of two pounds and a half of blood had thrown her. He proceeded to an examination both externally and per vaginam. He found the uterus properly contracted, uniformly firm, and free from pain on pressure. The os uteri presented no coagulum, and was not more open than usual four days after delivery. Dr. Kilian was perfectly ignorant, and had indeed not the most distant suspicion of the cause of the hemorrhage; for he had already carefully ascertained that the entire placenta had come away. Under these circumstances all that could be prescribed were

general preventive measures ; such as the horizontal posture, repose, and cold applications to the external parts of generation," &c. The patient continued gradually gathering strength till the 7th of February, when she was visited by a precisely similar attack of flooding, which recurred on the 13th, and again on the 26th, each time the loss being very sudden and profuse. After this last attack she remained very much debilitated, and exhibiting the greatest despondency. The circulation was rapid, and the respiration correspondingly affected. On the 3rd of March, during the visit of the physician, there was a renewal of the hemorrhage, which ended in convulsions and death. "At the post mortem examination, all the viscera were found in a normal condition, except the uterus, and a cursory inspection of that did not betray its disease. It was pale, contracted, and firm ; but on its front surface was observed a circular spot, rather larger than a half-crown piece, of a pale red colour, and less firm than the rest. An incision was made in the uterus posteriorly, and on its internal surface was discovered a tumour, corresponding to the above-mentioned spot, two inches long, and one and a half broad, of which the covering membrane hung down into the cavity of the uterus, and thus facilitated the inspection of its internal structure. This was extremely vascular ; on looking into it, the open mouths of the innumerable vessels were easily discernible by the naked eye. Around the tumour the substance of the uterus was rather softer than elsewhere, and the numerous vessels leading towards it formed a concentric network"<sup>a</sup>.

<sup>a</sup> A case resembling this in its pathological features is narrated by Dr. Carswell. A lady, aged 45, died from the effects of uterine hemorrhage, to attacks of which she had been subject for some years. "The only morbid appearance found consisted in a round, flat tumour, nearly three inches in breadth and half an inch in thickness, situated at the fundus uteri, and projecting into the cavity of the organ in the form of a mushroom. It appeared at first sight to form part of a large fibrous tumour situated posterior to it, and contained in the substance of the uterus. It was, however, a distinct tumour, the central portion of its posterior surface being but slightly



The following case, extracted from Dr. Collins' invaluable record, is a very remarkable example of secondary hemorrhage in consequence, apparently, of a laceration sustained by the uterus during labour. A woman, "on the fifth day after delivery, without any apparent cause, was seized with violent hemorrhage. When we saw her, which was immediately after, no pulse could be felt; and, though most prompt and active measures were employed, she died in less than an hour. She had been delivered, by the natural efforts, of a living child (her fifth), after a labour, not very severe, of forty-eight hours; nor from that time was there distress of any kind perceptible. On dissection the abdominal viscera appeared healthy, as did the uterus at first sight; but on raising it out of the pelvis, about the size of a shilling of its muscular substance, corresponding to the projection of the sacrum, was found to have given way, the peritoneal covering remaining uninjured. There were two spots in the vagina approaching to a state of slough."

Perhaps in this history the data do not warrant us in concluding that the loss of blood proceeded from the laceration of the uterine structure. That such might have taken place, however, cannot admit of question. The same may be said of the following case, which occurred in the practice of Smellie. Having stated that, in consequence of flooding, he deemed it necessary to deliver the patient by turning the child, he continues: "Unluckily, when stretching the os uteri, which felt thin and rigid, like a piece of parchment, the woman shrunk from the side of the bed, which obliged me to dilate with more

attached to the mucous membrane, and was composed of a cellulo-vascular tissue, with here and there small cavities filled with a yellow-coloured serosity, or a fluid resembling chocolate. The free surface was covered by a smooth membrane, presented a mottled aspect of grey, blue, red, and yellow, and was traversed by numerous varicose vessels, some of which were pretty large. From these vessels, I believe, the hemorrhage proceeded; and it is probable that the periodical character of the discharge, and the frequency of its recurrence, depended on the erectile nature of the tumour."—*Pathological Anatomy*, fasciculus 10, plate iv. fig. 2

force than I intended, to get my hand into the uterus; at which instant I felt the mouth of the womb give way, and tear at the side, so as to allow my hand to pass without further difficulty. The flooding diminished after delivery, on giving her fifteen drops of the *tinctura thebaica*, but returned in two hours, and ceased again on repeating the same medicine. She slept pretty well all night, was next morning much recruited by the refreshing rest and nourishing diet, but soon after was attacked with a violent hemorrhage from the vagina, by which she was in great danger of expiring immediately. This was checked by introducing into the vagina a sponge dipped in a solution of alum. To me it seemed probable that this flooding might proceed from some of the large vessels being torn that enter at the side of the uterus. She was long weak, but by the assistance of the *cortex Peruvianus*, and a nourishing diet, recovered."

Madame Lachapelle narrates two or three cases of hemorrhage supervening some hours after delivery, in consequence of slight lacerations at the vulva. In one instance, where cold wet cloths, and even cold injections into the vagina, had quite failed to restrain the discharge, she discovered the source of the hemorrhage to be a tear in the left nymphæ. By applying a piece of agaric to this, and confining it there with a plug or pad of charpie, the bleeding was effectually subdued. She gives two other examples of this kind, but the hemorrhage in them took place during or immediately after labour. A similar result I have seen produced by the rending of a cicatrix in the vagina during the expulsion of the foetus. The bursting of a thrombus, or "bloody tumour" of the labium, may also be the cause of very smart hemorrhage some hours after delivery.

A very interesting and singular case of secondary hemorrhage is recorded by Baudelocque, in the third volume of his *System of Midwifery*: "A woman, whose pelvis had but two inches eight lines in the diameter of its entrance, having suffered no extraordinary accidents in the first eight or ten days of her lying-in, though the labour had been exceedingly la-



borious, on the twenty-second was seized with a considerable flooding, being then walking in her chamber; but this flooding, which lasted but an instant, did not hinder her from getting up the next and the following days, till the thirteenth, when she sank under a fresh hemorrhage, which lasted no longer than the former. On opening the body we found a purulent collection in the cellular substance which surrounds the right psoas muscle, and a considerable varicose sac, lined with sanguine concretions, which had opened with the abscess at the superior part of the vagina, a little anteriorly. The uterus was small, compact, and shut, and contained not a drop of blood within." In this relation the account of the necroscopic appearances is very deficient, and leaves us in ignorance upon many points of importance. The nature of the connexion between the abscess and "varicose sac" is not explained; neither are we informed what vessel this sac originated from, nor even whether it was from a vein or an artery, though the former may be presumed from his using the epithet "varicose."

At a meeting of the Dublin Obstetrical Society, Dr. Sibthorpe related the history of a remarkable case in which death occurred about three weeks after delivery, as the result of uncontrollable hemorrhage from the vagina. At the time of its occurrence there was no reason for supposing that this flux of blood did not issue from the uterus; but the post mortem examination (at which I assisted) led to a very different conclusion. The womb was found well contracted, of the natural size, and without any trace of blood in its interior. A large coagulum existed in the vagina. Some sloughing of this canal had been going on, and had extended through its substance at the left side, corresponding in situation to the descending ramus of the pubis: and it was conjectured that the coats of some vessel, a branch, probably, of the internal pudic artery, had been destroyed, whereby the hemorrhage was produced. At all events no other source for it could be discovered. As this

woman was in a weak, exhausted state at the time, having had a very difficult labour, the actual amount of loss which she sustained was by no means great.

In the present Number of this Journal my friend Dr. Johnston gives the details of a very singular, if not unique case, in which, five days after parturition, fatal hemorrhage took place, from what appeared to be a varicose aneurism in the substance of the uterus.

In discussing the treatment of secondary hemorrhage, I shall, so far as it may be found convenient, follow the same order as that in which its causes have been described. It is not to be expected that in every case coming before us we shall be able to discover the exact cause of the effusion, no more than can be done in every case of hematemesis, or of hemoptysis. But this very circumstance, the absence of any obvious or assignable cause, is, *per se*, a sort of evidence, and simplifies, in some degree, the treatment. In all examples of this kind we must only be guided by the following general principles, viz.: to tranquilize the circulation, both local and general; to promote the condensation of the uterine structure; and to use such constitutional and local remedies as may tend to favour coagulation at the mouths of the vessels. It may occasionally happen, even where we know what the exciting cause has been, and are fully alive to the importance of its removal, that this may be a matter of only secondary consideration, the first object being to relieve the present urgent symptom, in fact to stay the effusion; having effected this we can devise at leisure the best means of obviating the conditions which have led to the outbreak of hemorrhage.

In fulfilling the first and second of the above indications of treatment, the means to be employed are sufficiently obvious. Perfect rest in the horizontal position is to be strictly enjoined, and stimuli of every kind rigidly withheld; the patient must lie on a hard bed in which her hips cannot sink; and firm pressure, with occasional friction, should be made over the uterus,



so as to promote its contraction, and expel any coagulum that might have formed within it. At the same time the ergot of rye should be administered with as little delay as possible, since in these cases our chief reliance for the suppression of the discharge is on this remedy. Fifteen or twenty grains of the fresh powder may be given in the first instance, and repeated, if necessary, in forty minutes or an hour. If the discharge be not very profuse it may be more advisable to give the ergot in five or six grain doses every three or four hours; but in every case I would recommend the first dose to be a full one. A caution should here be mentioned respecting its use. If the patient be alarmingly reduced when the practitioner is called in, the propriety of administering ergot will require serious consideration, inasmuch as this drug exercises a decidedly sedative influence upon the system. This property, which, doubtless, enhances the efficacy of ergot in many cases, renders its exhibition questionable where extreme exhaustion is present. If the patient has been only a few (two, three, or four) days brought to bed, it is not desirable on slight grounds to have recourse to cold applications, for fear of inducing uterine inflammation; but if she have been longer confined, or if the flux of blood be immoderate, the same objection does not obtain. The ordinary modes of using cold for the suppression of uterine hemorrhage are well known, and need not be here described. I have seen very excellent effects from an enema of cold water, in which a spoonful of common marine salt had been dissolved. If the bowels require to be unloaded, the enema produces a doubly good effect. Having by the diligent and judicious employment of these measures subdued or greatly abated the discharge, the administration of a moderate dose of black drop, or of liquor opii sedativus, may be resorted to with advantage. It proves useful in many ways; it induces sleep, "nature's sweet restorer;" it allays the nervous excitement and irritation, which so constantly are present in these cases; and it tends to tranquillize the circulation.

It occasionally happens that these means are found inadequate to accomplish the desired end, and something further must be done. To meet this exigency we possess a very powerful resource in the tampon or plug. The danger to be apprehended in using it is internal hemorrhage. Baudelocque and Madame Lachapelle have both recorded cases where a fatal result was produced in this way, one on the seventh and the other on the fifteenth day after delivery. The latter author observes that if the patient have been one or two weeks brought to bed, it is barely possible for the uterus to become distended with blood. In every case, however, such a contingency can and should be guarded against, by securing a pad over the uterus with a well-applied binder; and if this is not deemed a sufficient provision, we can make "assurance doubly sure" by examining from time to time over the hypogastrium, to satisfy ourselves that the womb is not enlarging. Leroux and Chevreul are strong advocates for the tampon, and Baudelocque, though he considered it a last resource, nevertheless admits that he employed it many times with success. Dr. Ingleby says he used it "with the best effect in hemorrhage imminently dangerous, as late as fourteen days after delivery, the uterus being firmly contracted." "More than once," he adds, "I think I have preserved life by the agency of the plug." If the vagina be inflamed or sloughing, either condition would of course forbid the use of the tampon, and under these circumstances nothing but the direst necessity would justify its employment. In such a case as this I should prefer trying an injection of cold water, or, better still, of cold infusion of matico, into the vagina. A silk pocket-handkerchief forms about the best material for a plug that can be used, and it is always at hand. Other substances have been recommended, such as sponge or dossils of linen, or a vulcanized Indian rubber bag which is to be inflated after its introduction. This last is the suggestion of M. Diday of Lyons, and a description of it will be found in the tenth volume of this Journal, p. 129.



The plug should not be allowed to remain longer in the vagina than twenty-four, or at most thirty-six hours.

Several cases could be related illustrating the utility of the tampon, but I need only adduce two or three. Perfect was sent for to a lady who got violent flooding some weeks after delivery. He "stuffed the vagina full of dossils of fine tow and oxycrate; kept the patient in a cool, still, horizontal posture; gave her an opiate, and the flux stopped. On the third day the dossils came away spontaneously. She recovered well, and went through two subsequent pregnancies." The two following examples occurred in the Lying-in Hospital, and came under my own observation. A woman was delivered of her first child after a labour of five hours' duration. Half an hour after the birth of the child, the uterus relaxed, and the pressure applied to it expelled the placenta. This was followed by a slight draining of blood, which was checked by the ordinary means, but recurred two or three times during the day. The next morning (she being then twenty-four hours brought to bed), a large clot was expelled from the vagina, and was followed by pretty copious hemorrhage. As the uterus was not firmly contracted, cold and pressure were made use of, and a dose of ergot administered, but without success, as the loss went on slowly but continuously. An examination was made per vaginam, but nothing abnormal could be detected. The pulse was quick. As the patient had now become extremely weak, and the hemorrhage still continued, the vagina was plugged, and every care at the same time used to prevent the possibility of internal hemorrhage. A blister was also applied over the sacrum. By these measures the discharge was arrested, but the patient was so very weak, that brandy and opium had to be given. Though the pulse continued rapid for some days, she nevertheless made a good recovery. The plug was allowed to remain in the vagina for twenty-four hours, when it was cautiously withdrawn.

A. B. was confined of her fifth child at mid-day, after a

labour of six hours. The placenta came away in twenty-five minutes, and was followed by a slight discharge of blood, which ceased upon tightening the binder and applying a cold wet napkin to the vulva. In the afternoon she had a return of hemorrhage; but it was not severe, and yielded to friction and cold. She remained quite free from all discharge until the following morning, when, on making some exertion, the hemorrhage broke out afresh. The usual means, such as ergot, friction, cold, &c., were now diligently employed, but without avail. There was only one remedy left, and that was the tampon. To its employment there was the less objection, as the uterus felt pretty firmly contracted; accordingly, the vagina was plugged (the usual precautions being observed against internal hemorrhage), and this effectually put a stop to all further loss. The pulse continued quick for several days, and she suffered considerably from headach; but there was no other untoward symptom, and she made a good recovery.

Where the hemorrhage manifests a disposition to recur, or where there is time to admit of it, we should have recourse to constitutional means for its suppression. Keeping in mind the hint which Dr. Ayre's remarks supply, we should satisfy ourselves that the liver and bowels are in a healthy state of action, and, if necessary, prescribe some opening medicine. Where this has been attended to, but without effect on the sanguine discharge, some medicine from the astringent or styptic class should be tried. Acetate of lead is the one most extensively used, but though it enjoys high reputation as a styptic, I cannot say I have ever seen any striking or marked result from its employment in these cases. Dr. Ingleby recommends it specially in irritable habits, but he also says, "under much depression it will be quite inadmissible." It is not improbable that much of its utility in cases of hemorrhage is to be attributed to its sedative property. It is best given in solution, with an excess of acid, and with the addition of a small quantity of acetate of morphia. The same accoucheur states, that in cases



of the kind now under consideration he “ can with much confidence recommend the sulphate of zinc, in pills of one or two grains, combined with a quarter or half a grain of opium, or exhibited in the infusion of orange-peel.” The dilute sulphuric acid is another remedy largely employed as a hemostatic, but it does not seem to possess any claims for preference in these cases. Within the last few years gallic acid has taken a high place in the list of styptic medicines. Dr. James Hughes<sup>a</sup> and Dr. Neligan<sup>b</sup> have recorded in the pages of this Journal examples of its efficacy in restraining sanguineous discharges from the kidneys, urethra, stomach, uterus, and bowels; and Dr. Stevenson relates several cases of uterine hemorrhage, not, however, connected with pregnancy, which were treated most successfully with this remedy. Last November I saw, along with Mr. Brabazon, surgeon to the Drumcondra Dispensary, a case of excessive uterine hemorrhage, connected with hydatids, in which the gallic acid appeared to act most speedily and efficaciously. This patient was so reduced by the enormous loss of blood she had sustained, that we deemed it unsafe to give her ergot of rye. Whilst these pages were going through the press, I had occasion to exhibit this medicine in a case of protracted hemorrhage after an early abortion, and it acted very promptly and effectually in suppressing the bleeding. It is reasonable, then, to suppose that gallic acid may prove a useful remedy in many cases of secondary hemorrhage. The usual dose is three grains, in the form of pill made with liquorice powder and conserve of roses, every three or four hours. Where the danger is imminent, the dose may be much increased: in urgent cases of hemoptysis, Dr. Christison has given so much as thirty-six grains in twelve hours.

The tincture of Indian hemp and the oxide of silver are two other remedies that have acquired considerable reputation in

<sup>a</sup> New Series, vol. iii. p. 275, and vol. ix. p. 309.

<sup>b</sup> Ibid. vol. ix. p. 347.

the treatment of certain sanguineous discharges from the uterus. The anti-hemorrhagic properties of the former were discovered by Dr. Maguire, of this city; and Dr. Churchill has reported most favourably upon its use in menorrhagia. In one case of uterine hemorrhage nine days subsequently to delivery, I made trial of it, and with a satisfactory result. Donovan's tincture of the resin was the preparation employed in all these instances.

Some time back attention was drawn to the advantages of oxide of silver in menorrhagia, by Dr. Butler Lane and Sir James Eyre. Their observations have been fully confirmed by Dr. Thweatt, of the United States. "The oxide of silver is," he thinks, "best adapted to those forms of menorrhagia which depend on an undue excitation of the uterine organs, accompanied with high inflammatory action. Cases often present themselves where profuse hemorrhage makes its appearance at the usual menstrual period, or immediately after it has passed; in these cases there is an extraordinary excitation of the nervous system. The oxide of silver here often acts like a charm, calms the perturbation of the nervous system, and arrests the hemorrhage by its astringent qualities. It should be given in large doses, and repeated at short intervals, until some effect is apparent. Women, after parturition, are frequently troubled with a sanguineous discharge, distinct from the lochia, which is difficult to remove by the usual remedies. The oxide of silver is an infallible remedy for this pathological condition"<sup>a</sup>. The ordinary dose, he says, is half a grain to one grain twice or three times a-day, combined with a small proportion of opium. If all that this writer affirms of the oxide of silver be true, it deserves to hold an exalted place in the *materia medica* of the accoucheur; but his praise of it is too unmeasured for implicit belief. A blister to the sacrum is another means that has sometimes been followed by a very marked subsidence

<sup>a</sup> Ranking's Abstract, vol. x. p. 320.



of the discharge. The value of this remedy I learned from Dr. Johnson, when his assistant in the Lying-in Hospital; its *modus operandi* is not very apparent, but of its utility I have witnessed many examples.

If the hemorrhage is of an atonic or passive kind, approaching in character to menorrhagia lochialis, it will probably be found that medicines of the tonic and chalybeate class will prove most serviceable. A very admirable combination in these cases is a mixture composed of sulphate of iron, sulphate of quina, dilute sulphuric acid, and water; if required, a small quantity of Epsom salts may be added. In the following case I had recourse to this mixture with complete success, after having in vain tried other means to conquer the hemorrhage. On September 14, 1848, I delivered Mrs. M. of her seventh child, after a short labour. The placenta came away in ten minutes, together with the membranes and some clots. She recovered so satisfactorily, that I ceased attending on the 22nd. On the evening of the 24th I was requested to visit her again, and found her in a rather weak state, and much frightened, there having been a free discharge of blood from the vagina for some hours,—which had never occurred before, even in her confinements. From the effects of the hemorrhage on her system, and the quantity of linen which was saturated with blood, it was plain that the loss must have been very considerable. Her pulse was quiet, and her bowels had been freed in the morning. I made an internal examination, but could discover nothing, except that the mouth of the womb was rather patulous. I ordered cold wet napkins to be applied to the vulva, and half a drachm of powdered ergot to be given through the night, in three doses. This treatment produced some temporary abatement of the discharge, but did not seem to exercise a decided influence over it. Upon the 27th, finding the loss to be still going on, and the pulse to be perfectly quiet, I ordered the above mixture three times a day.

This very promptly and completely arrested the sanguineous discharge.

Dr. Leake recommends the exhibition of strong infusion of bark and elixir of vitriol, with a small quantity of tincture of cinnamon, as being very efficacious in cases of severe flooding after delivery. That particular variety of secondary hemorrhage I am now speaking of is very fully described by Chambon (*Maladies des Femmes en couches*); in addition to the tonic plan of treatment, he recommends astringent injections into the uterus.

Before concluding this part of my subject, I should perhaps mention, that oil of turpentine in full doses has been much lauded by Mr. Griffith, of Wrexham, in extreme cases of uterine hemorrhage before and after delivery, as well as in menorrhagia. He gives so much as an ounce, with half that quantity of sweet almond oil, for a dose. This remedy is not suitable, he thinks, in cases where there is a hot skin, a full pulse, and undiminished strength.

Where there is ground for suspecting that the attack of secondary hemorrhage results from the retention of a portion of the placenta, a vaginal examination should at once be made, to determine the question, and to ascertain whether the offending substance be accessible or not, as its speedy removal is most desirable. I would here reiterate the precept already laid down, that in no case of secondary hemorrhage should an internal examination be omitted, since this is the only mode of diagnosis by which we can distinguish with certainty some of the causes that give rise to the discharge; and besides, during the presence of the hemorrhage an opportunity may be afforded for extracting a clot or fragment of placenta, which might not again present itself. Where the retained mass is within reach of the finger, and can be got away without violence, there is no second opinion about the propriety of doing so. But this may not be a matter so



easy of accomplishment, and the question then arises, how far is the practitioner justified in making attempts to withdraw the retained substance? This is a point on which it is impossible to give any definite directions in words. Dr. Ingleby's opinion is, "that whilst rashness cannot be too much deprecated, we should not be justified in abstaining from a cautious attempt, should a favourable opportunity occur, and the mass be within reach of the fingers."

Baudelocque tells us he has seen hemorrhage from this cause not show itself till the tenth day after delivery; and he adds, "When it is abundant, as it was in that case, it requires us to pass the hand into the uterus, to extract the foreign body from it." Further on he gives more judicious advice: "If we were certain of the existence of these portions of the placenta at the time of the deliverance, it would be better to extract them immediately than to wait till succeeding accidents oblige us to it; but if we are not called till some time afterwards, there must be very great accidents to determine us to take the same method." The use of a small crotchet has been recommended by Dr. Dewees for hooking away the foreign body out of the uterine cavity: but this, or any similar instrument, I have never seen used for the purpose, and feel convinced of the impropriety of all such attempts. If the safe removal of the retained bit of placenta be impracticable, we must only employ such palliative measures as shall tend to keep the discharge in check. Strict rest and quietness, cold applications, cold enemata, blistering over the sacrum, plugging the vagina, and the administration of ergot, may be severally or conjointly required, according to the circumstances of the case. Dewees thinks very favourably of the ergot in this kind of hemorrhage; and as a subsidiary means for restraining the discharge, there is no doubt of its occasional value and general admissibility.

Where, from the absence of any other adequate cause, and from the existence of ulceration of the os uteri, we are led to believe that this is the source of the hemorrhage, our

measures should, of course, be directed to heal the breach of surface. The treatment to be pursued in these cases does not differ essentially from that which is applicable to ordinary cases of inflammatory ulceration of the cervix uteri. For full and satisfactory information on this subject, therefore, I must beg to refer the reader to the admirable works of Bennett, Ashwell, and Churchill, as I can here give only a mere outline of the broad principles of treatment. Common prudence will suggest the advisability of postponing topical applications to the os uteri, until the system has recovered from the effects of parturition. If a fortnight or three weeks can be allowed to pass over, so much the better. Then we may begin to touch the surface of the ulcer with the nitrate of silver, or some other caustic,—and many have been proposed,—once or twice a week; a mild injection may be thrown into the vagina daily, and active counter-irritation should be made over the sacrum; this I look upon as a very important part of the treatment, and never to be neglected. Contemporary with these measures, constitutional treatment must in every case be employed. The stomach and bowels having been brought into a healthy state of action, by a course of gentle alteratives and aperients, the administration of tonic medicines may be commenced; our great object being to improve the general health, and to restore the system at large to its most normal condition, that in which all the functions, especially those of nutrition, are performed with the greatest regularity and vigour.

Having in any given case ascertained that the secondary hemorrhage is due to the presence of a polypus, the leading question of practice will be the propriety of removing the growth. Although flooding is not the only symptom which may force this question on our consideration, yet on the present occasion we must confine ourselves to it alone. The following observations, therefore, will be understood to have reference solely to this effect of the polypus. Operative interference with the tumour during the puerperal state is apt to



be attended with unpleasant or dangerous consequences, owing to the increased size and vascularity of the uterus and of the tumour at this period, as well as from the tendency then existing to inflammation or phlebitis. Thus in a case in which Van Doeveren twisted off a polypus during labour, the woman's life was in imminent danger from abdominal inflammation for some days after. Dr. Davis relates a case where the ligature applied to a polypus immediately after delivery produced a fatal result; and in the case recorded by Mr. Fordham, the polypus was tied very soon after delivery, and the woman died next day. The unfortunate result in this instance should not, perhaps, in justice be imputed to the ligature. The urgent symptom which necessitated interference was violent forcing pain, and this could not have been allayed simply by encircling the growth with a cord; excision should have followed.

On the other hand, many cases might be adduced in which the polypus was successfully tied or extirpated before, during, and soon after parturition. Merriman and Gooch relate cases where its removal was effected by ligature, during gestation, without disturbing this process. Van Doeveren successfully twisted off a considerable-sized polypus during labour; and in a like case, where a polypus was obstructing the descent of a six-months foetus, Pugh tied the pedicle and then excised the growth below. The child was born in half an hour, and the woman recovered well, and was subsequently four times pregnant. In addition to these, numberless other cases could be adduced where the polypus was removed, with complete success, soon after delivery: further on I shall have occasion to quote some of them.

Notwithstanding this array of evidence in favour of the early performance of the operation, it still can hardly admit of question that the safest and most prudent course, in cases of secondary hemorrhage from polypus, will be to forego all attempts at extirpating the tumour as long as possible, or until the woman has recovered from the effects of parturition, when the

attendant risk will be infinitely less. In furtherance of this object we must strive to keep the discharge in check by the diligent use of cold, styptics, the tampon, and, perhaps, ergot of rye. Should the hemorrhage persist in spite of these measures, our only alternative is the removal of the tumour. Torsion, ligature, excision, or a combination of the two last, are the various modes by which this may be effected. The situation of the growth, whether within or without the uterine cavity, the thickness of its pedicle, and the presence or absence of pain, are the chief circumstances which should influence us in determining our mode of proceeding. "If," says Dr. Oldham, "the pedicle of the tumour be within reach, I should prefer, having first tightly drawn a ligature around it, to cut off the polypus immediately below it; as this practice would be likely to quiet the womb, besides arresting the hemorrhage, by diminishing the foreign body which provoked its action, and would save the organ from being exposed to the influence of so much putrid matter by the decomposition of the polypus below the noose. If, however, the polypus is so enclosed by the womb as not to be so readily reached for this purpose, the application of the ligature alone upon its stem is the next best means to be had recourse to. Should the pedicle be ascertained to be small, and the growth very moveable, torsion, perhaps, may be attempted." Of this form of secondary hemorrhage I shall now give a few examples, which will also illustrate each of the above modes of removing the polypoid growth.

"Dr. Ramsbotham was called to a lady about thirty years of age, by Mr. Moon of Tottenham. She had been delivered naturally about three weeks before, and during this time she had had slight and irregular discharges of blood. On the morning Dr. Ramsbotham saw her she had passed blood enough to cause fainting. She took small doses of ergot without relief. 'I found the uterus,' says Dr. Ramsbotham, 'as large as a six months' pregnancy, and tender; a slight discharge was going on *per vaginam*; the uterus was large; the os soft, spread, and close:



I could just get a finger in, and thought there was a secondary foetus, or large coagulum. I gave ergot in larger quantity, which produced much pain.' On Tuesday morning, after much pain during the night, Mr. Moon felt the os opening, and something within the cavity; and at 2 o'clock, P. M., he was hurriedly sent for, from the severity of the pain, and the nurse finding something protruding. He passed his hand into the uterus without much trouble, by the side of the tumour, and found it attached, by something like a funis, to the fundus. He embraced the stem firmly, and, under strong uterine contraction, his hand and the tumour were expelled together. This lady recovered without a bad symptom."—(Oldham.) M. Jacquemier gives a case in which Cloquet detached a large polypus "by the simple action of his fingers," after parturition, and with the most happy result: the woman recovered speedily.

Dr. Radford writes: "I was called to a woman who had been delivered six hours, the labour having been natural. The discharge was greater than usual with her; and strong bearing-down pains, with gushes of blood, continued to distress her. Between the pains there was a continual dribbling discharge. The contracted uterus was felt above the pubes, rather larger and softer than it usually is; but when the pain recurred it sensibly diminished in size, and became harder. In consequence of the violent uterine pain, I felt convinced that some irritating mechanical body was provoking the organ; as a part of the placenta, a coagulum of blood, a polypus, or a partial inversion of the uterus; and in order to satisfy myself of the real nature of the case, I introduced my hand into the vagina, and the finger through the os uteri, which was open. I felt a firm body, which, when pressed laterally, moved; and, on carrying the finger along the surface, I found it less above than below. I therefore concluded it was a polypus. I gave a drachm of laudanum to quiet the pains, and applied cold vinegar and water to the external genitals, to restrain hemorrhage until I could fix a ligature on the growth. These, however, were

ineffectual; and whilst I was waiting in the house she was seized with a very strong bearing-down pain, like one of the last expulsive pains of labour, which induced me again to examine. I found the tumour in the vagina, at the os externum, quite detached from the uterus, as large as a middle-sized orange, with a slender pedicle. From this time the pains gradually subsided, and the hemorrhage ceased. The patient recovered without the slightest interruption."

The same author details another case where he detached a large polypus, by torsion, from the interior of the uterus, before the withdrawal of the placenta. This patient slowly recovered, but the delay was owing, in a great measure, to all the blood she had lost before Dr. Radford saw her.

In these four cases it will be perceived that the pedicle of the tumour was forcibly severed, in one instance by unaided uterine action, and in the other three by torsion. In those which I am now about to cite, the extirpation of the polypus was effected by means of the ligature. M. Deguise applied a ligature, after a twin delivery, to a polypus, "du volume d'une poire de bonchretien." The tumour was detached on the eighth day, and the patient did well.

"M. Guyot relates a case where he saw a female, five hours after delivery, in whom a polypus the size of a foetal head at term was attached, by a flat pedicle two fingers' breadth, to the interior and right side of the womb. It had presented before the head, but there was no loss of blood. On the following day, on account of pains in the groin and loins, he determined to remove it, which he accomplished with perfect success, by ligature and excision."—(Oldham.)

Dr. Montgomery's paper, already quoted, contains the history of a very interesting case, in which he ligatured a large polypus within three weeks after delivery, and with the most satisfactory result.

Dr. Radford was sent for on one occasion, to see an hospital patient who had been delivered naturally and easily on the



previous day. Considerable hemorrhage had taken place. "I found her," he writes, "pale, and the pulse frequent and small. The discharge generally dribbled, but took place frequently in gushes. She was much harassed by violent bearing-down pains. The uterus was felt above the pubis, contracted, but rather larger than common. I now made an ordinary vaginal examination, but could discover nothing beyond the patulous os uteri. Not feeling satisfied with this mode of exploration, I passed the hand into the vagina, and the finger through the os uteri, when I felt a tumour about the size of a large pear, which was attached to the anterior part of the uterus towards the left side. It was pendulous, and, as far as I could ascertain, had a narrow pedicle. I judged it to be a polypus, and knowing the danger to be apprehended from the insidious bleedings which occur in these cases, I at once determined to pass a ligature round the pedicle, which was effected without much trouble. A plug was introduced into the vagina, and secured; and a bandage, with a compress, placed round the lower part of the abdomen. The ligature was tightened daily without pain, and on the eighth day the tumour was detached and the canula withdrawn." This patient perfectly recovered.

The foregoing histories will, I trust, sufficiently illustrate the course to be pursued in the treatment of secondary hemorrhage, when produced by polypus of the uterus.

For instructions as to the management of *inversio uteri*, when the cause of secondary hemorrhage, I must refer the reader to the various treatises upon the diseases of women, and especially to the monographs of Dr. Crosse and Mr. Newnham, as the limits to which I am necessarily restricted will not admit of my entering upon it here. This omission I have no reason to regret, as in the works referred to this subject is amply discussed.

I almost feel that, before concluding, some apology is due for the great length of this paper, which has run much beyond the extent originally designed. The only excuse I can offer

in extenuation of this fault (if such it be regarded) is, that it results from the number of cases detailed, and which I deemed it necessary to insert, as the subject of secondary hemorrhage after parturition is in some measure new, not having hitherto been made the object of any special investigation, or treated of in a distinct and connected manner<sup>a</sup>.

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ART. IX.—*On Pus in the Urine, as an Aid to the Diagnosis of some Diseases of the Genito-urinary System.* By JOHN HAMILTON, Surgeon to the Richmond Hospital, and Lecturer on Surgery in the Carmichael School of Medicine.

WE observe pus in the urine under different aspects: first, as a uniform deposit, of a pale yellowish-white colour, sometimes a little shaggy on the surface, and falling down immediately after micturition, but which, by agitation or stirring, can be readily mixed through the urine in flocculent masses. To the naked eye it has the characters of pus, and by the microscope is found to consist of pus-globules. This pus is, in fact, pure, and the urine acid. Secondly, mixed with some mucus in *acid* urine, presenting a uniform, slightly tenacious, and slimy, yellowish-white deposit, showing on the field of the microscope irregular masses of pus-disks. And thirdly, after having been acted on by the ammonia in decomposed urine, as a thick, adherent, ropy mucus, with some transparency beneath, and exhibiting on the surface a stratum of yellow, opaque pus.

<sup>a</sup> Since the above paper went to press I have received Mr. Robertson's "Essays and Notes on the Physiology and Diseases of Women, and on Practical Midwifery," a work only just published. In it I find a section devoted to the consideration of "Secondary Uterine Hemorrhage," containing the results of the author's experience upon this subject. *Sixteen* examples of this species of flooding, many of which occurred to himself, are there recorded. In all these cases the hemorrhage took place within a month after delivery, and in *ten* of them within a fortnight. *Two* women sank under the loss of blood; all the rest recovered. In *ten* instances the attacks of hemorrhage occurred oftener than once.



Pure pus may get into the bladder from the bursting of an abscess in the adjacent areolar tissue, or some neighbouring organ. In women an abscess of the broad ligament of the uterus does so sometimes; and I have seen a case where dissolution seemed impending from apparent peritonitis, but the symptoms became suddenly alleviated on the supervention of vesical irritation, and the escape of a quantity of pure yellowish pus in the urine, which continued many months in gradually lessening quantity. After long-continued uterine irritation, an abscess had formed in the broad ligament; this abscess had become adherent to the side of the bladder, had broken, and discharged its contents into that viscus.

A young woman of the name of Nowlan was admitted into the Richmond Hospital, in June, 1846. She had chancres round the inner labia, with much œdematous swelling of the labia majora, and a bubo in each groin, which had broken before admission. The left opening healed, but the right continued to discharge, and the swelling was very large, from a number of the surrounding glands, particularly the deep glands in the iliac fossa, being engaged in its formation: in this direction a probe could be passed far, and deep-seated pressure caused matter to flow out. She soon became very ill, complained much of pain in the iliac fossa, extending down the thigh to the knee; she kept the thigh flexed, and could not bear pressure on the groin; her stomach became irritable; she had diarrhœa, and there was high fever. At last she was suddenly seized with much irritability of the bladder, and passed a quantity of yellow pus in the urine. The report for the next day was as follows: "She has passed since last night about a pint and a half of dirty, white-coloured urine, thick with pus, which is easily mixed up with the urine, and again slowly subsides. After having stood six hours, the pus occupied one-third of the fluid. The urine is very acid. The microscope<sup>a</sup>

<sup>a</sup> In all the microscopical investigations mentioned in this paper I had the able assistance of my friend, Dr. Frazer.

showed the yellow deposit to be composed of pus-globules." The quantity of pus gradually diminished to about an ounce and a half, then an ounce, and finally disappeared altogether, and she got well. From the moment the pus appeared in the urine all matter ceased to come by the external opening of the bubo, which rapidly closed up. In this instance, the matter, not getting free exit by the small fistulous passage of the external opening, accumulated; and a deep-seated abscess was formed, which made its way into the bladder. It may be observed that in such cases as this, the pure pus, entering the bladder from an abscess in the neighbouring part, causes no decomposition of the urine, even after long standing. Pus coming from an abscess in the substance of the kidney, though one of the urinary organs, does not produce a different result.

A man aged 50 was admitted into the Richmond Hospital October 28, 1846, with aggravated symptoms of stricture of the urethra, the result of a fall on the perineum six years before. There was a hard swelling on the perineum; this ended in an abscess, which I opened: it discharged pus and urine for a few days, but finally closed. No instrument could be got into the bladder. After the perineal abscess had quite healed, his urine still contained pus, a cloud of yellow matter in the centre of the lower stratum of the fluid, as if a table-spoonful of pus had been put into it. The urine was acid, and remained unchanged after having stood many hours. Though he had frequent calls to make water, I yet gave my opinion, that if there was any inflammation of the bladder it was slight (which proved to be the fact, its mucous membrane being found of a pale slaty-green colour, bloodshot here and there), and that the pus was not secreted by it; but that the appearance of the purulent matter, and the persistent acidity of the urine led me to believe it came from an abscess in some organ leading into the bladder, which organ I believed to be the kidney, from the pain he suffered across the loins, the lassitude, emaciation, liability to urinary rigors, and vomiting. He finally sank



under obstinate diarrhœa. On examination, the cortical substance of both kidneys was found full of abscesses, some the size of peas, others of nuts or chesnuts. The left kidney was double its natural size.

In acute abscess of the prostate gland, when the abscess bursts, the matter sometimes flows into the bladder as well as out along the urethra; and as there is much irritability, pain, and frequency in making water, the disease may, and has been, mistaken for inflammation of the mucous membrane of the bladder, and treated accordingly. But when the symptoms depend on inflammation of the prostate gland alone, though the urine contains much pus and is turbid, yet the deposit of yellow matter begins immediately after micturition; and it has all the physical characters of pus to the naked eye and under the microscope. The urine will be *acid*, and *continue acid* after having stood many hours; and even in those cases where the enlargement of the inflamed gland is very great, so as to prevent the whole of the urine from being expelled from the bladder, when what remains is drawn off, though often very turbid, it will be found to be acid. Of this I could give many examples.

In chronic or scrofulous abscess of the prostate gland, pus also frequently flows into the bladder. It is a very obscure disease, and one of the most intractable I am acquainted with. Both with respect to prognosis, and also to avoid the exhibition of useless or injurious remedies, it is most important to distinguish it from chronic cystitis, with which it is sometimes confounded. The two following are instances of this distressing complaint.

Mr. L., aged 26, is greatly distressed by a frequent necessity of passing water, at least ten times during the night, so that he can scarcely get any rest, and his general health is greatly impaired. He is obliged to strain, as there is some difficulty, and he has observed a little whitish matter to flow

from the urethra when the water first comes, and also at the end: this I saw myself. The urine is very pale, slightly turbid, and *deposits at once* a whitish, flocculent sediment, which is purulent in appearance, and is shown by the microscope to be composed of pus-globules; it is faintly acid when passed, and *continues so* after having stood twenty-four hours. By the finger in the rectum I could feel a corded thickening along the *prostatic* and membranous portions of the urethra, and a general soft fulness of the prostate, but no well-defined swelling or hardness.

His pulse was quick; his tongue loaded; he had great thirst, bad appetite, and general lassitude. Two years before, without previous gonorrhœa, he became affected with much pain at the neck of the bladder, and frequent calls to make water; this was followed by a sudden gush of matter, and a greater freedom in passing water. He continued to pass matter; his symptoms became very aggravated; he had great pain and frequent calls; the urine deposited slime and blood, and for a long time he seems to have suffered dreadfully from acute cystitis, the inflammation having extended from the neck of the bladder to the mucous membrane of the bladder itself; but the obstruction from the former necessitated the daily introduction of the gum-elastic catheter. After much and varied treatment the first violence of the disease abated, when his present distressing condition commenced.

I regarded his symptoms now to depend on a chronic abscess in the prostate gland, constantly discharging more or less pus into the bladder; and that the frequent calls did not depend on inflammation of the mucous membrane of the bladder, but were due to the swelling of the prostate at the neck of the bladder, which not only caused the difficulty of passing water that he experienced, but also prevented him from ever completely emptying the bladder. I therefore passed a No. 9 silver catheter; it met with that general resistance of the urethra,



from swelling of its sides, which I have already noticed to be present when the prostate is inflamed<sup>a</sup>, and which was overcome by very gradual pressure. The instrument required the hand to be very much depressed to enable it to enter the bladder; and though he had just made water at my desire, and passed six ounces, I yet drew off four ounces more which had remained behind in the bladder.

It is not my intention at present to describe the further progress or treatment of this case; it is enough to observe that the number of calls to pass water during the night was at once reduced from ten to three times, above which it has never since got, and his general health is wonderfully better, but the quality of the water remains unchanged.

Received into a glass immediately after being passed, it is observed to be of a pale, limpid, and slightly opalescent appearance, throwing down at once an irregular cloudy or shreddy, opaque, yellowish-white deposit. It is acid. At the end of twenty-four hours the deposit settles down into a uniform, yellowish sediment, exhibiting at the edges a regular stratiform arrangement, gradually thinning away. It is adherent to the bottom of the glass, but there is not the least ropiness. The urine above the deposit is quite clear, as limpid as distilled water. It is still *acid*.

Mr. O., aged 45, consulted me in January, 1850; he was pale, languid, and sickly-looking, his face strongly indicative of suffering. He complained of great frequency in passing water, every half-hour during the day and night; it comes in a small stream, and requires forcing, and there is some sharp pain towards the end, but not severe; he has a full feel in the rectum, with pain darting from it down to the perineum.

Four years ago he contracted gonorrhœa, and a year afterwards the present affection began. He has consulted several medical men with only temporary and partial relief.

<sup>a</sup> See the Number of this Journal for May, 1850.

The urine is very pale, slightly turbid, with shreds through it, but no blood or slimy deposit. By the finger in the rectum the prostate can be felt very large, so that the point of the finger cannot be got beyond it. It is rather soft, but not fluctuating; anteriorly there is hardness, which extends along the urethra for some distance: the whole is tender on pressure.

I passed a No. 8 gum-elastic catheter without the stilet; it met with the usual obstruction at the neck of the bladder from enlarged prostate, but went on by tilting the point up by the finger in the rectum. Though he had passed water ten minutes before, I drew off six ounces, showing the want of power to empty the bladder completely.

The urine was examined after having stood eighteen hours: it was slightly *acid*, with a sediment of pus-globules, but no mucus.

In this case there was incontinence of urine at night, for the same reason as in the enlargement of the prostate in old men; in both cases the circular fibres at the neck of the bladder cannot act efficiently in completely closing the orifice, owing to the firm, inelastic structure of the diseased prostate. At night a larger quantity of urine accumulates during sleep, and then the incontinence begins; whereas, in the day the irritation being at once attended to, it seldom attains quantity enough to overflow through the imperfectly closed internal meatus.

A little more than a month after I first saw him, I found four ounces still remaining in the bladder, which he was unable to pass. As it was drawn off, the last few drops consisted of shreddy pus; in other respects it was as before, continuing *acid* after having stood many hours.

I have now adduced sufficient examples of one set of cases, viz., those in which pus is present in the urine, but not secreted by the mucous membrane of the bladder. The pus in these cases is little changed, the chief alteration being, perhaps, that the soft texture of its globules is somewhat broken up by the action



of the fluid in which it is present. The urine also is little changed, as far as the power of resisting decomposition is concerned. It is *acid, and remains acid* after having stood many hours.

With these let me now contrast some cases of inflammation of the bladder, in which pus, secreted by the vesical mucous membrane, exists in the urine. A very essential distinction will be perceived.

The mucous membrane of the bladder, as is well known, in common with other mucous membranes, the Schneiderian, bronchial, urethral, &c., when inflamed, soon secretes pus, but at the same time pours into the bladder, to mix with the urine, a vitiated mucous secretion, which seems to impart to the urine a disposition to speedy decomposition.

The urine in these cases enters the bladder, from the kidney, acid, and becomes mixed with the purulent and mucous secretions of the inflamed membrane; if these are not very abundant, the urine continues acid in the bladder and is passed so, but on standing for some time the deposited secretions become decomposed, and ammonia is generated, which acts on the pus, throwing it down as a thick, slimy, ropy mucus; it also combines with the phosphate of magnesia already in the urine, constituting an insoluble salt, the triple phosphate, which either floats as an iridescent pellicle on the surface of the urine, or, in prismatic crystals, is fixed in the ropy mucous deposit at the bottom. The amorphous phosphate of lime is also frequently thrown down as a light powder of an ochry colour, and forms a sediment on the surface of the ropy mucus. A deep yellow deposit of urate of ammonia is more rarely met with.

If, as in a case of paraplegia from broken or diseased spine, the urine is long retained in the bladder, and from the inability of the patient to move, is kept pretty tranquil, it undergoes these changes, the deposit takes place in the bladder itself, and the decomposition of the urine next to the deposit is in progress, while the portion of urine above it may remain acid; but when

the inflammation gets more intense, and the morbid decomposing secretions very abundant, the whole of the urine will be rendered alkaline in the bladder. If the water be now drawn off it is found turbid, and full of flakes of pus, and ropy mucus clogs up the eye of the catheter, or comes through it in semi-transparent strings. It has also a pungent ammoniacal odour.

James Holland, aged 25, a labourer of robust frame, was brought to the hospital, December 13, 1845, with the spine fractured across, the first and second lumbar vertebræ having been crushed by a large iron boiler which had rolled down on him. He had complete paralysis of sensation and motion of the lower extremities, and retention of urine, and after living for eight weeks he sank under the accident and its consequences, viz., extensive stripping of the back, erysipelas, and inflammation of the bladder. From the first he required the use of the catheter. The urine drawn off was high-coloured, scanty, and acid.

Fifty or sixty hours after the accident he began to suffer from irritability of the bladder, and required the instrument to be more frequently passed, three times a day; he also complained of a burning feel in the bladder, which was very tender on pressure. On the fourth day the urine was not so intensely acid, and there was some stillicidium. On the eighth day a pint of acid urine was taken away, and from the eye of the catheter a string of mucus was drawn out, which turned reddened litmus paper blue; in the evening there was so much of this mucus that it clogged up the instrument, and rendered it difficult to withdraw the urine, which was, moreover, turbid with mucous shreds. It was evident the bladder had become inflamed, and that there was an increased secretion of mucus and pus; the decomposition of the urine converting the latter into ropy mucus. On the seventeenth day, the urine drawn off was alkaline; it was very thick, particularly at the latter end, and of an opaque milk-white colour, and on standing there was a copious ropy mucous deposit. The next change was, that it became bloody,



and continued so till his death, which took place on the 13th of February. On one occasion Messrs. Green and Frazer, by my desire, washed the bladder with tepid water, to see if, after the remaining alkaline urine or deposited mucus was removed, the urine which entered the bladder immediately after, was acid. Besides a fracture of the second lumbar vertebra, penetrating through the dura mater and pressing on the spinal marrow, with ramollissement of the latter at the seat of the injury, the bladder was found contracted, its coats thickened to a remarkable degree; and the mucous membrane of a deep red colour, with here and there, particularly on the prominences of the rugæ, a deposit of a yellowish-grey substance,—amorphous phosphate of lime, I believe. The calices of the kidneys contained some purulent matter.

A man, aged 75, was admitted into No. 9 ward of the Richmond Hospital, in December, 1850, with retention of urine. The resident pupil failed in relieving him, but I introduced a large gum elastic catheter, and drew off a considerable quantity of pale urine, followed by some blood. The prostate gland could be felt greatly enlarged, forming a tumour in the rectum equal in size to an orange. He was never able to pass water, and his death took place about a fortnight after his admission. In the various attempts which had been made to introduce an instrument, the prostate must have been wounded, as there was considerable hemorrhage into the bladder. The blood coagulated in it tinged the urine a reddish colour, and came away in clots through the catheter, or blocked up its eye and stopped the flow of urine, until it was removed by the injection of a little water. Symptoms of violent inflammation of the bladder soon manifested themselves; pain and tenderness over the pubis; incessant straining, and desire to have the catheter introduced frequently; hot skin; quick, feeble pulse; and dry, brown tongue. The urine drawn off was rather turbid, had a pungent ammoniacal smell, was highly alkaline, and

on standing threw down a copious deposit of ropy mucus tinged with blood, above which was a layer of yellow pus.

I have at present in the Richmond Hospital, under my care, a young man with extensive curvature of the dorsal vertebræ from caries, and, I believe, ramollissement of the medulla spinalis. There is complete paralysis of sensation and motion of the lower extremities, with incontinence of urine and partial retention. The urine is alkaline, with a pungent ammoniacal smell; turbid, with shreds of pus through it; and on standing throws down a copious deposit of ropy mucus, a yellow layer of pus-globules on its surface and a deep yellow powdery stratum of urate of ammonia. There are also an iridescent pellicle of triple phosphate on the surface, and numerous crystals of the same salt through the deposit at the bottom. All these changes take place in the bladder, a large-eyed catheter being required to draw off the water, from the quantity of thick mucus in it. I washed out the bladder with tepid water, and left the catheter in it for an hour: when the plug was removed, the urine that flowed out was found quite acid, proving what I have already stated, that the urine does enter the bladder from the kidneys, when they are sound, acid, but quickly becomes decomposed in that organ when the morbid mucous secretion from the inflamed bladder is abundant.

In all these cases pus was present in the urine in the bladder, not, as in the first series, having come from neighbouring organs, but being secreted by the intensely inflamed mucous membrane, which at the same time produced other morbid secretions that caused the urine to deteriorate rapidly, so rapidly that when, from paralysis or mechanical obstruction, it was retained any time, the decomposition began in the viscus itself, thus offering a striking and distinguishing mark from the cases in which other organs furnished the matter, and where the urine continued acid even after having stood twenty-four, thirty-six,



and forty-eight hours. When, therefore, we find urine containing pus to be alkaline, and to deposit ropy mucus, we may conceive the bladder to be inflamed; whereas matter in urine, which continues acid after having stood many hours, has come from an abscess which has broken into the bladder. This is analogous with those cases in which blood is mixed with the urine. Blood is little changed by the urine, except mechanically, and it causes no disposition to alkalization. I mixed some recently drawn blood with urine, and at the end of twenty-six hours the latter was acid and unchanged, except in colour, pale pink and clear above the clot deposited at the bottom. When blood comes from the inflamed vesical mucous membrane, like pus under similar circumstances, it is present with alkaline urine and ropy mucous deposit, but like pus it has not *per se* any decomposing influence.

I could easily multiply cases of this description, but I think sufficient evidence has been adduced in support of the above opinions; and by keeping in mind the distinction of the different qualities of purulent urine, we shall be assisted materially in our diagnosis as to the source of the pus. Even in cases which would otherwise present great difficulties, this distinction will avail us in clearing them away, and in leading to a right mode of treatment, the aim of all our investigations.

The following complicated case exhibits the difficulties by which we are occasionally beset.

Thomas Lennon, aged 45, a mason, was admitted into the Richmond Hospital with retention of urine, April 11, 1849. It was found to depend on a large calculus imbedded in the bulbous portion of the urethra, which had been there for a year and a half, gradually enlarging. A former retention had been relieved by an abscess which had opened in the perineum and discharged pus and urine for a short time, and then nearly closed. I removed by incision a calculus a little less than a walnut in size. The incision terminated, as is often the case after the removal of large urethral stones, in a urinary fistula,

which was, however, rapidly closing under the use of instruments passed every second day, when he left the hospital on some business, promising to return in a short time, for the complete cure of the fistula. I saw nothing of him, however, until June 27, 1850, more than a year afterwards, when I found the fistula still unclosed, a large quantity of urine coming by it, and the stream from the natural orifice very small, owing to the contraction of the urethra at the former seat of the calculus. By a peculiar mode of treatment, which I shall describe on another occasion, I completely cured this fistula in five days, when he left the hospital, with the promise to come twice weekly, to have instruments introduced to prevent contraction of the urethra. This, with a carelessness too common in his class, he neglected to do; but three months after, October 22, he came to the hospital, the fistula having re-opened. With difficulty I got a No. 6 silver catheter into the bladder, and I determined to dilate the stricture fully before again attempting to cure the fistula. The dilatation was much slower than I anticipated; and having got a No. 8 gum elastic catheter in, I altered my previous resolution, and tried to relieve him of the inconvenience of the urinary fistula. It was quite closed on November 29th, for twenty-four hours, when it opened afresh, and I now became sensible that the urethra was obstructed beyond the stricture at the bulb, and that it was difficult to overcome an impediment at the neck of the bladder. He had for some little time previously suffered from irritability of the bladder, and this now increased very much, so as to keep him awake during the night; but there was nothing peculiar in the urine. I felt by the rectum the prostate gland much enlarged, but soft; and on the 31st December, in drawing off the water, as I was removing the catheter, a sudden gush of yellow flocculent matter came out, at least half an ounce in quantity. It was now, therefore, clear that an abscess in the prostate had been slowly forming, which had lessened the stream of urine, impeded the progress of amendment by instruments, and, from its conti-



nuous irritation along the urethra, prevented the fistula being closed by the same treatment that had previously succeeded. After this the irritation was somewhat lessened, and the urine passed freer, and contained small quantities of flocculent pus. The amendment was only short; he became very ill, had rigors, great frequency in passing water,—every five or ten minutes,—hot skin, quick pulse, dry tongue, and, after a time, diarrhœa, with loss of flesh, and night-sweats. The urine underwent a decided change; it became *alkaline* after standing, and, besides pus, threw down a copious deposit of ropy mucus, adherent to the bottom of the vessel; in short, the inflammation had extended from the prostate to the mucous membrane of the bladder. I found he could not completely empty the bladder, in consequence of the swelling of the prostate, as, after he had passed water, I drew off six ounces of neutral urine.

December 23. The urine he passed yesterday, and which has stood for twenty-four hours, is very characteristic of acute cystitis. It is alkaline, contains carbonate of ammonia, and has an iridescent pellicle of triple phosphate crystals on the surface; there is a thick deposit of adherent ropy mucus, with a layer of yellow pus over it; many triple phosphate crystals are seen by the microscope through the ropy mucus. Wishing to examine the urine recently passed, I got him to make water in a glass. It was pale yellow, turbid, and deposited at once a layer of pale yellow pus, one-eighth of an inch thick (most probably chiefly from the prostatic abscess). When this deposit was stirred, it rose in flakes, which quickly fell to the bottom again. Before the urine cooled, iridescent pellicles of the triple phosphate were evident on its surface. The urine was alkaline, but not so much so as that which had stood twenty-four hours, the reddened litmus paper being less intensely blued. I waited ten or fifteen minutes, and then drew off the urine that remained in the bladder; as he had improved in the power of expelling it, there were only between two and three ounces. Though turbid with pus, yet it was faintly *acid*. This acidity arose, I think, from

some freshly secreted acid urine having entered the bladder, and become mixed with the detained urine there, the time being too short for decomposition. Two days after, I drew off some neutral urine, and then allowed the catheter to remain in the bladder five minutes. I tested the few drops as they came from the catheter, and found them quite acid. Under careful treatment, he slowly but steadily improved. On the 7th of January, some urine which had been a long time in the bladder, and which I drew off, was acid; and all the water passed from the 7th to the 8th, about three pints, after having stood for many hours, was faintly acid; there was no pellicle, and no ropy deposit, only a central cloud observable. He has no frequency, the water comes in a full stream, and he is beginning to pull up flesh. A No. 8 catheter enters the bladder readily. The fistula closed, and I saw him in February, perfectly well.

The cure of the inflammation of the bladder, at one time very severe, I attribute, in a great measure, to the *continued exhibition of alkalies*, although the urine was not only alkaline after long standing, but was even passed alkaline. This is a point on which I wish to lay great stress, as by some surgeons of high character, who have written on the subject, the direction is, "if the urine is acid, give alkalies; if alkaline, give acids"<sup>a</sup>. Now I think the fact which I have established in these cases of inflamed bladder, that, though the urine passed was highly alkaline, pungent even, from the presence of ammonia, yet it had entered the bladder acid, and most likely, therefore, irritating to the inflamed mucous membrane, will explain the good effects which I have invariably found to follow the use of alkalies. I removed, by lithotomy, a large, rough stone from the bladder of a gentleman, which I never could have done, had he not been prepared for the operation by these remedies. He suffered more from cystitis than any person I ever saw; incessant calls to make water, attended

<sup>a</sup> Sir B. Brodie. Inflammation of the Bladder, Lectures, 1842, p. 108.  
Sir P. Crampton, on Lithotrity, Dublin Quarterly Journal, February, 1846.



with great pain, straining, and prolapsus ani; urine bloody, ammoniacal, with copiousropy, mucous, and purulent deposit, and abounding in triple phosphate. After all the usual routine of pareira, buchu, wild carrot, &c., various acids, large doses of opium, by the mouth or rectum, had totally failed to relieve him, the most striking amendment followed the use of the Vichy water, allowing the operation to be performed with a fair chance of success. Whatever the real rationale of the action of the liquor potassæ, the carbonate of soda or of potash, lime water, the Vichy water, real or artificial, may be, their soothing effect on the irritated or inflamed mucous membrane of the genito-urinary system cannot be denied, and we should not, therefore, be deterred from their use because the urine is alkaline, this condition being the result of decomposition, from the large quantity of vitiated secretion poured into it by the inflamed mucous membrane of the bladder. Whatever, therefore, tends to lessen this inflammation, which alkaline remedies seem to have the power to do, would, by lessening the morbid secretions, most speedily prevent the decomposing property of the urine, and restore it to its natural state.

In conclusion, I may observe, that the facts of the urine continuing acid, although containing pus, and the tendency to decomposition where mucus is secreted into it, have already been noticed by authors; by Dr. Golding Bird, in his invaluable little treatise on urinary deposits; by Simon, and others. But the connexion between these phenomena and particular pathological conditions did not appear to me to have been sufficiently elucidated to prevent an endeavour to aid so important an object.

ART. X.—*On a peculiar Form of Thrombus occurring during Labour.* By WILLIAM F. MONTGOMERY, A. M., M. D., Professor of Midwifery, &c., to the King and Queen's College of Physicians in Ireland.

THERE are two situations in which the formation of a thrombus or bloody tumour during natural labour is a matter of common observation, namely, on the head of the child, and at the vulva of the woman; but I think I have fully satisfied myself that there is a third variety of it to be met with in practice, invested with no little interest, and involving considerations of much practical importance,—where an effusion of blood takes place in the tissue of the uterus, near the os uteri, and more especially in the anterior lip of that organ.

On the first variety, or that which forms on the head of the child, I do not propose at present to make any observations. With regard to the second, it does not appear to have been recognised, or, at least, was not described by any English writer<sup>a</sup>, until Dr. M'Bride of this city published an account of two cases of it in 1776<sup>b</sup>. Nor do I recollect to have met with an instance of it in my own practice for several years, until 1849, when I met with two within six weeks, the first on the 23rd August, and the second on the 4th October.

The former was in a lady with her first child; her labour was short and natural, with but little effort or straining, nor was I aware of the occurrence of the tumour until after delivery, when I found it on the edge of the left labium, but ruptured, and its contents partially discharged. The swelling subsided within a few days, and no subsequent inconvenience was ex-

<sup>a</sup> The following passage from Veslingius, in 1647, appears to describe this accident very exactly: "Alias jam bis observassem ab effuso intra tunicas vaginæ sanguine in partu difficili, pudendi labium ingenti tumore distensum fuisse, quo aperto, sanguineque atro paulatim evacuato, mulieres evasere." —*Obs.* 50.

<sup>b</sup> Medical Observations and Inquiries, vol. v. p. 89.



perienced from it. The lady, who was not young, recovered very favourably.

The second case occurred in a lady who had three or four premature children, and now for the first time, under my care, went to the full period of gestation. I was sent for at 6 o'clock, A. M., and her labour proceeded favourably during the next two hours; and at 8 o'clock I thought the child's head would be expelled in a few minutes. I now observed, however, that there existed a great fulness and thickness of the perineum and external parts, especially towards the left labium, which began to swell perceptibly, and, as it swelled, assumed a dark purple or blackish colour. It gradually became enormously enlarged, and the advance of the head was completely prevented, until at length, a little after 9 o'clock, the swelling burst on the inside, under the pressure of a pain, and a considerable quantity, not less than twelve ounces, of coagulated and fluid blood escaped. The pains almost immediately became effective, and the head advanced easily. The child, a girl, was born at half-past 9 o'clock, and all went on well; no hemorrhage of any consequence took place. Nothing was done except laying on a pledget of lint, wet with solution of alum, and making firm pressure with a napkin fastened to the binder.

The sloughs came away on the fourth and fifth days, without hemorrhage; the swelling of the labium and perineum gradually disappeared, and a clean open sore, of a healthy aspect, remained, which gradually healed, and was completely well at the end of four weeks.

The rupture of the vessel in this case took place in the perineum, and thence the effused blood percolated through the areolar tissue into the labium.

Two things particularly struck me when this occurrence took place:

1st. The immediate effect produced on the uterine contractions, which were at once impaired, both in frequency and power; and

2nd. The complete resistance which the tumour offered to the advance of the head.

It is a very rare occurrence in private practice. Several friends to whom I have spoken say they have never met with it among their patients.

M'Bride<sup>a</sup> witnessed only two cases, and Denman<sup>b</sup> only three, most of which occurred, or were first noticed, after the labour was over. Davis<sup>c</sup> mentions two or three. Dr. Clarke, who has recorded the results of 3878 deliveries in private practice, does not mention any instance of it.

In Dr. Collins' record, too, of 16,414 cases of delivery, there is not, I believe, any instance mentioned of this accident.

No unpleasant consequences attended the cases which occurred to me. Denman says:—"But I believe it is void of danger, not having seen or heard of any dangerous consequence from it, or ever found anything necessary to be done, but to wrap the tumefied part in a flannel wrung out of warm water and vinegar, and on the discharge of the coagula, which should not be hastened, to dress the little sore with some soft liniment."

Davis says, that "the subsequent hemorrhage was so moderate as to excite no alarm" (p. 46), and the lady's recovery was speedy and uninterrupted.

This is so far satisfactory, but all cases of this kind have not been so exempt from trouble or danger; very free and persistent hemorrhage having been occasionally found to cause the practitioner much anxiety; and in not a few instances the result has been fatal.

In a case of thrombus, which is reported in the *Revue Médico-Chirurgicale*, Mars, 1850, a thrombus formed during labour, and the attendant, a "sage femme," mistaking it for a bag of membranes protruded, unfortunately succeeded, under

<sup>a</sup> Medical Observations and Inquiries, vol. v. p. 89.

<sup>b</sup> Introduction to Midwifery, fifth edition, p. 627.

<sup>c</sup> Obstetric Medicine, p. 44.



that impression, in rupturing it, by which an opening was made, from which the blood poured "like water from a sponge."

The edges of the laceration were pinched up, and caught between a split stick, which completely arrested the hemorrhage. The woman, luckily, was not delivered for three days afterwards; no hemorrhage returned, and she did well.

In a case recorded by M. Stendel, the tumour burst during labour, six or seven pounds of blood were quickly poured out, and the patient expired.

Mr. Crosse, of Norwich, says, that in a case which he saw "during a protracted labour, rupture of the left labium took place, to the extent of two or three inches, followed by great loss of blood, and the patient died undelivered."

Within the last year I saw a case in which a thrombus, about as large as a good-sized red plum, formed in the left labium, in the seventh month of pregnancy, and gave the lady *intolerable annoyance*, so that on the 18th June I made a very small puncture into it, and discharged its contents; but on the 13th July I was again sent for, and found her in a similar state of distress, from pain caused by a feeling of weight and tension, of which she complained most grievously. She described the sensation she experienced as resembling that produced by the pressure of the child's head when distending the perineum. I found the tumour rather larger than before, and again punctured it, after which the lady suffered no further annoyance. It did not fill again, and on the 24th of August she was safely delivered of a full-grown child.

There was no appearance to mark the situation where the tumour had been; nor was there any attempt at its reproduction subsequently.

So far, all the cases alluded to have been of effusion into the external labia pudendi, but I think I have learned from sufficient observation that these are not the only situations in which thrombus occurs during, or in consequence of labour, but that quite a similar accident, though differing much in

degree, happens not unfrequently in the tissue of the cervix uteri, and especially in the substance of the anterior lip of the os, giving rise to a condition greatly resembling in some of its characters that which is generally spoken of as œdema of the part, from which, however, it is altogether a different affection.

The first time that this matter attracted my attention in practice was in the following case :

Mr. S. requested my attendance on his wife, on 11th March, 1830, at 10 o'clock P.M., she being then in labour.

The night before she had diarrhœa and some discharge of blood from the vagina; she had six children by a former marriage, and her last was now five years old.

I found her with labour established, and with some hemorrhage, but not much. One part of the lower portion of the cervix, towards the right side, felt very prominent, thickened, and spongy, so as most strikingly to resemble a portion of the placenta; and it appeared to me that it was from this part the hemorrhage was proceeding. The head presented naturally; the labour progressed favourably, and as the descending head came to press more forcibly into the os uteri, and on the spongy tumour, its contents were discharged; the hemorrhage ceased, and did not again return, and at half-past twelve o'clock a male child was born, healthy and vigorous. The placenta came away in about ten minutes. There was no further hemorrhage or other unfavourable symptom, and the lady recovered well.

Mr. S. was a medical man, and, seeing the hemorrhage, he became anxious, and made an examination, when he was greatly alarmed at feeling, as he thought, the placenta at the os uteri, and immediately sent for me.

After hearing his report, I examined the patient, and at the first moment thought his account was only too correct; but a little further examination easily satisfied me of the true state of the case, because it was clearly evident that the tumour resembling the placenta was not merely applied to the inner sur-



face of the uterus, but was identified with the substance of the organ, so that it was impossible to insinuate the point of the finger between them, while it could be readily passed behind or partially around.

To those who may not have met with this state of the parts, I would beg leave to say, that the resemblance of this tumour, when in the form in which it occurred in this case, to the placental structure, is sometimes so close as very readily to deceive an incautious examiner.

The circumstances under which we meet with this condition in practice are generally as follows: about the time when the os uteri is more than half dilated, especially if the waters have already been evacuated, we find that the anterior lip gets gradually, but pretty quickly, fuller, thicker, and more prominent, and, instead of yielding readily before the pressure of the head, and slipping away upwards, it continues to descend as the head is forced downwards; and if we try with the point of the finger to push it past the head, and out of the way, we do not succeed; an unexpected delay now takes place, and a labour which we have every reason to hope would go on quickly, and be completed within a short time, is protracted for perhaps two or three hours, or even more, and the patient's pain increased both in character and duration. At length the swollen labium diminishes, suddenly recedes, and disappears, and very often, at the same moment, some blood is discharged, generally of a deep rich colour, and now the retarded head descends more quickly.

I do not wish to be understood to say that the swollen lip in such cases always bursts and discharges its contents, for such is not the fact, but that this is frequently the result I feel quite assured.

I had recently (10th October, 1850) an opportunity of *seeing* this condition of the anterior lip of the os uteri during labour. The lady had four children, and her labour was in every respect satisfactory. Shortly after the discharge of the liquor

amni the pains became urgent, and the anterior lip of the os began to swell, and immediately, as in all other instances of thrombus that I have met with, the propulsive power of the pains was at once impaired, although they continued strong, and returned at short intervals; but still the swollen lip resisted the passage of the head, or at least did not yield, and continued to be pushed down with it, until with each pain it protruded under the arch of the pubis, *of a deep purple colour, like that of black currant jelly*: suddenly it disappeared, and one or two ounces of deep, rich coloured blood flowed away; the pains became in a few minutes much more efficient, and the labour was soon happily completed. The lady recovered well.

Is this accident an occurrence of little moment beyond the temporary delay and increased suffering which it causes? or is it one that may have dangerous results? are questions of no inconsiderable importance.

Were I to judge from my own experience alone, I should be bound to say, that I had found both forms of thrombus, the external and the internal, free from *fatal*, though liable to produce *serious* consequences; but the experience and observations of others have shown that the bursting of bloody tumours, wherever situated, has been often a source not alone of great danger, but sometimes even of death.

I have already alluded to the occasionally pernicious nature of the hemorrhage accompanying the thrombus of the external labium, and I recently heard the particulars of a case, and examined the uterus after death, in which, I think, death resulted from a thrombus in the substance of the cervix uteri.

The case to which I allude was brought under the notice of the Obstetrical Society by Dr. George Johnston, and is related at length in the present Number of this Journal.

The woman had an easy and apparently safe labour, with a breech presentation, and for three or four days afterwards went on perfectly well; but on the fifth day, greatly to the



surprise of those who saw the patient, and found the uterus well and firmly contracted, a profuse hemorrhage took place suddenly, and the patient sank within an hour and a half.

After death, it was ascertained that there was in the substance of the cervix uteri, close to the os, at the left side, a distinct cavity, capable of containing a small orange, into which opened the mouths of several blood-vessels.

After a careful inspection of the parts, I felt no doubt that this was an instance of the accident I have been describing; that in fact a thrombus had formed, the cavity of which was filled by a coagulum; that the thin stratum of uterine structure, or perhaps only mucous membrane and areolar tissue, interposed between the cavity of the thrombus and that of the uterus, was gradually attenuated, and at length burst, or sloughed away, allowing, of course, the coagulum to escape, and the open blood-vessels suddenly to pour out a torrent of blood, under the overwhelming influence of which life was extinguished within the awfully brief space of an hour and a half.

It is to be observed, that in the case of thrombus of the external labium, related at the commencement of these observations, the slough separated on the fourth and fifth days; and here, in the case now before us, the fatal gush of blood took place just at the same interval after labour.

It is but right to say of such a case, that it exhibits one of those unforeseen but perilous accidents against which no human care or caution could guard, or human skill be always available to save the patient's life.

In the month of July of last year, I saw a case which I have great reason to believe was of the kind now under consideration.

A lady affected with varicose veins, which extended all up the lower extremity, and could be traced into the vagina, was delivered, after a natural and favourable labour, at midnight; but shortly afterwards a fearful rush of blood took place, very unexpectedly, for *the uterus was well and firmly contracted.* So

great was the hemorrhage, that complete prostration was immediately produced, and when I saw her, she was cold and pulseless, nor had she any return of pulsation in the radial artery for six hours and a half from the time of the sudden hemorrhage, and during a part of that time the action of the heart could neither be felt nor heard. All this time the uterus remained perfectly contracted, but in the situation of the anterior lip its substance felt as if broken up into a soft pulp, the consequence, as I believe, of the formation and rupture of a bloody tumour. To our great joy, she ultimately rallied under the treatment adopted, and completely recovered.

I believe the formation of a thrombus at or near the os uteri, its rupture, and consequently open state of some vessel or vessels in the cavity thus formed, is very often the real cause of those hemorrhages after the birth of the child and expulsion of the placenta, where the uterus is found to be well and firmly contracted; and it is to be recollected, that just where the thrombus forms is precisely the situation in which the contractile power of the organ is most feeble; and should it happen towards either side, it is then close upon the very part where the blood-vessels send in the largest supply to the uterus.

And I would say, that while we should neglect no general or subsidiary means to check the hemorrhage, or secure the patient from its dangerous effects,' our *greatest security*, under such circumstances, will be obtained by plugging the vagina, while, at the same time, we take the necessary precautions against allowing the uterus to relax and become distended with blood.

If the occurrence of this affection has been described or noticed by any former writer, I am not aware of it; but in the writings of two of our most eminent authorities in practical midwifery, I find in each a passage distinctly bearing upon the view I have here put forth, and, as far as they go, tending to confirm its truth.

At p. 271 of his "Introduction to Midwifery" (5th edit.),



the admirable Denman says:—"The uncoloured mucous discharge from the vagina, which pretty generally occurs before labour, on its accession is usually tinged with blood, or a small quantity of pure blood is discharged. This sanguineous discharge, which varies in quantity and appearance in different women, is popularly called a *show*; and it happens more particularly at two periods of a labour,—when the os uteri *begins* to dilate, and when it is finally dilated.

"In the first instance, it is probably occasioned by the separation of a few of those vessels by which the membrane which connects the ovum to the uterus was originally bound; and in the second case, by the effusion of some blood before *extravasated in the substance of the os uteri*; for this part, in some cases, acquires an uncommon thickness from that cause, independent of any *œdematous or inflammatory tumefaction*."

And Dr. Burns observes, at p. 460 of his "Principles of Midwifery" (9th edit.):—"In tedious labour the os uteri, and even the cervix, sometimes becomes swelled, as if blood were effused into the substance."

Where such a condition is recognised during labour, we shall show our wisdom by interfering as little as possible with it; by abstaining from attempts to get the gorged lip of the os over or past the head; and when the head does descend, and is expelled, we should be more than usually slow to withdraw the body of the child, more than usually careful to secure complete uterine contraction, and more than usually watchful of the state of our patient after all is over; although we must, at the same time, acknowledge the painful truth, that, with all the care and caution that the most anxious circumspection can prompt to the adoption of, an accident of this kind may take place under circumstances of which we have no intimation, until alarmed by the urgent danger of our patient, or struck aghast by her unexpected and untimely death.

ART. XI.—*On Eruptive Diseases of the Face.* By J. MOORE NELIGAN, M.D., M.R.I.A., Physician to Jervis-street Hospital, Lecturer on the Practice of Medicine in the Dublin School of Medicine, &c.

IN the sixth volume of the present series of this Journal I brought before the profession some facts, as regarded the diagnosis and treatment of eruptive diseases of the scalp, which had been derived from my own experience of these affections; and, in continuation of the subject of cutaneous eruptions, as they affect special localities of the body, I propose at present to speak of those which more especially appear on the face. In eruptions of the scalp, as I then remarked, the diagnosis between the various forms is difficult, chiefly in consequence of its peculiar structure, and of the growth of the hair; and the latter in particular prevents their treatment from being as simple and successful as when they appear on other parts of the body. On the face we have not the same difficulties to contend with, not even in males, where the site of the beard is the part affected; and the only peculiarity that is here presented arises from this portion of the cuticular surface being constantly exposed to the air, and being, of necessity, subjected to constant ablutions. The hands are the only other parts of the body which partake of these conditions,—of the latter in a greater degree even than the face; and we consequently find that eruptive diseases appearing on them, present, in some respects, a similarity of character.

Cutaneous eruptions appear on the scalp most generally in early life, being rare after puberty, while they usually occur on the face about the age of puberty, or in adult life. The latter are consequently a greater source of annoyance to the patient than the former, to say nothing of their disfiguring effect, so apparent to the eye of all. In most persons the mental anxiety which they occasion renders their treatment more difficult than it would probably otherwise be; and in some individuals of a ner-



vous temperament I have seen their occurrence lay the foundation of serious and prolonged ill health. Their investigation cannot therefore be regarded as beneath the notice of the physician, nor undeserving of careful clinical observation; yet until within the last few years the specialties presented by diseases of the skin, as due to the particular portion of the cutaneous surface on which they appear, had been scarcely noticed, and even now do not seem to me to attract a merited attention.

I shall follow in this essay the plan which I adopted in the paper I have already alluded to, namely, confine my observations to those eruptions peculiar to the face, or appearing on it without being at the same time present on other parts of the body; deviating from this arrangement only so far as regards diseases which affect the scalp and the face simultaneously, or spread from the one to the other apparently owing to contiguity of surface. I shall not, moreover, refer to those eruptions which are the consequence of venereal diseases, and have been termed by modern dermatologists, syphilides; because, as their development is dependent on a specific cause, they require a *special* plan of treatment, which could not be well described apart from a general consideration of venereal affections.

The predisposing causes of eruptions of the face are equally obscure with those of cutaneous diseases generally; yet there are certain habits of body in which they are especially apt to be developed, and foremost of these I would place the *scrofulous*. In an essay which I published in this Journal<sup>a</sup> on Scaly Diseases of the Skin, I have attempted to prove the connexion which exists between their occurrence and this diathesis, and I think general experience will bear me out in stating that eruptions on the face are most commonly met with in scrofulous individuals. Hereditary predisposition also is manifestly a very constant predisposing cause. And to these, I think, may be added two peculiar conditions of the skin which are very

<sup>a</sup> New Series, vol. viii. p. 348.

opposite to each other, the one, in which the cuticular surface is peculiarly fine, apparently thin and transparent, fair, and abounding in clear blue veins, and the other, in which it is coarse, sallow, greasy, and shining, with thickly-set sebaceous glands. It must be remarked, however, that both are regarded as accompaniments of the scrofulous constitution.

Amongst the exciting causes may be enumerated constant exposure of the face to the heat of the fire, especially after meals, or to dry harsh winds: the former usually produces some of the forms of pustular or tubercular eruptions, the latter papular or vesicular diseases; the use of rich articles of food or of spirituous liquors; habits of anger or sudden excitement; anxiety of mind; constipation; local irritants; and, in short, everything which causes determination of blood to the face.

I cannot adopt the same classification of eruptions of the face which I did of those that occur on the scalp, namely, into inflammatory and non-inflammatory; for, in my experience, all the forms which appear there present a more or less inflammatory character in some part of their course. I shall, therefore, following the classification, and, to a great extent, the nomenclature of Willan, simply enumerate their generic names. The terms proposed by our great English dermatologist indicate, as I have already remarked on a previous occasion, with sufficient accuracy, the distinctive characters of these diseases; and by their adoption we insure simplicity in nomenclature, and avoid the confusion which arises from proposing new names. The following are the eruptions of the face which I mean to describe as peculiar,—in the view I have said I would use that term,—to that part of the cutaneous surface, namely, acne, impetigo, lichen, herpes, eczema, psoriasis, sycosis, porrigo, and lupus.

ACNE.—This, by far the most frequent of the cutaneous diseases of the face, is a pustular eruption, though classed by Willan and Bateman amongst the tubercles. By some of the French and German writers it is termed *Varus*, the name that was applied to



it by the Greek and Latin physicians. No matter what form it may present, it is essentially an inflammatory affection of the sebaceous follicles, and, consequently, appears most frequently on the parts of the face where these glands are most numerous, as on the nose and chin. It may occur in the form of single or scattered pustules, without any redness of the surrounding cuticular surface, though the base of each pustule is usually more or less hardened. Or it may appear in clusters thickly set on the inflamed skin, which is of a rose-red or crimson colour. And, when the disease becomes chronic, the sub-cutaneous areolar tissue is also inflamed, lymph is effused into it, and the eruption assumes a decidedly tubercular character. Three distinct varieties of acne are thus constituted: acne simplex, acne rosacea, and acne indurata.

The first of these varieties is very common, few young persons at the age of puberty being altogether free from its occasional occurrence, individuals with the coarse greasy skin, described above, being, however, particularly liable to it. In such persons the sebaceous follicles are peculiarly developed, secreting copiously the thick curd-like matter which naturally exists in them; individual follicles, apparently obstructed at the orifice, become distended, and present a black point at their apex (*acne punctata*); they then take on an inflammatory action, and are converted into pustules, which usually run a chronic course. It cannot be said that the appearance of this form of eruption on the face depends on any special cause, except that of constitutional predisposition; nor is it attended with any ill effects, beyond the annoying, though temporary, disfigurement which it occasions. I do not think moreover, that it is apt to assume a chronic character, the pustules gradually ceasing to be formed soon after puberty. Persons, however, who, when young, suffer from acne simplex, are more liable than others to be affected with either of the other varieties of the disease.

Acne simplex can scarcely be confounded with any other

eruption of the face. Pustules of ecthyma sometimes, though rarely, appear on this part of the cuticular surface, but they are readily diagnosed by their large size and phlyzacious<sup>a</sup> character, and are invariably present at the same time on other parts of the body.

When pustules of acne simplex form on the face, the sooner they are opened, and the curdy matter they contain pressed out of them, the more rapidly they disappear. In persons predisposed to them, I have found the best preventive treatment to consist in the use of carbonate of soda instead of soap to wash the face, and in the application of a spirituous lotion, consisting of two drachms of oil of lemon and half a drachm of oil of rosemary in a pint of rectified spirit, immediately after the face is washed. Should the eruption accompany a constipated state of the bowels, as it sometimes does, the use of mild saline cathartics, more especially in the form of the natural mineral waters, as those of Pullna,—which I have found especially useful,—will be requisite.

*Acne rosacea* is generally a disease of more advanced life than the form now described, and, unlike it, is very apt to assume a chronic character, not unfrequently terminating in the third variety. It is also more inflammatory in its nature. It generally commences as a cluster of minute pustules, hard and but little elevated, on a reddened patch of the skin. These pustules or pimples enlarge gradually, but are slow to mature, and their base becomes harder, often very painful, and much inflamed. When they eventually burst, or are opened, they discharge a small quantity of a curdy pus, but the hardness of the surface still continues, and the red or crimson patch often remains on the face for months, or sometimes for years, spreading gradually over the nose, cheeks, and chin, and constantly giving origin to fresh crops of similar pustules. The disease

<sup>a</sup> PHLYZACIUM. “A large pustule raised on a hard circular base, of a vivid red colour. It is succeeded by a thick, hard, dark-coloured scab.”—Willan.



is thus usually of an aggravated character, and, from its unsightly appearance, causes great mental annoyance. It is also very rebellious to treatment, and, even when apparently completely cured, exceedingly apt to return.

This form of acne is frequently connected with the state of the uterine function in the female, in many cases appearing for the first time, in those predisposed to it, at the turn of life; it also occasionally, but much more rarely, attacks the face of young girls about the period of first menstruation; and when it does so, they are very liable to constant returns of it on the least exciting cause, particularly any of those I have already adverted to. It is also a constant accompaniment of a deranged condition of the digestive organs, especially when attended with constipation; and in many persons is evidently caused by indulgence in the pleasures of the table, particularly a too free use of rich wines or of spirituous liquors. Prolonged or extreme mental excitement is also a frequent exciting cause of acne rosacea.

Where this eruption appears to be dependent on, or to be connected with any of these causes, the first step in treatment should, of course, be directed to them; but the use of local applications should not be, in the mean time, overlooked. When it is seen in its early stages, or when there is much inflammatory action present, the application of leeches behind the ears two or three times a week, at bed-time, will be found of much service, together with the daily use of Pullna or some other saline cathartic mineral water, taken an hour or two before breakfast. The dose of Pullna water, which I ordinarily prescribe, is from one to two wine-glassfuls mixed with an equal quantity of tepid water. For persons who are unable to purchase mineral waters, I order the compound saline powder, prepared as I have recommended in my work on Medicines<sup>a</sup>. Having by these means subdued the inflammatory condition

<sup>a</sup> Third edition, p. 107.

where it exists, I then commence the use of iodide of potassium in the decoction of elm-bark, adding, in some very obstinate cases, an eighth of a grain of iodine to each dose of the iodide. Of the numerous local applications which I have tried in the treatment of this form of acne, I have found none so useful as the ammonio-chloride of mercury (white precipitate) in the form of ointment, in the proportion of twelve grains to the ounce of spermaceti cerate, to which three minims of the oil of bitter almonds are added. This ointment is applied at night, and washed off in the morning with an alkaline wash, —half a drachm of the carbonate of soda to eight ounces of water. In cases in which the skin of the face is harsh and dry, and inclined to crack or bleed, I order from two fluid drachms to half a fluid ounce of glycerine to be added to this wash. Carbonate of soda should also be used, instead of soap, to wash the face. For men who are compelled to shave, a sufficient lather is easily raised, by first smearing a very little olive or almond oil on the face, and applying the shaving-brush, dipped in a saturated solution of carbonate of soda in soft water, over it. The diet should be carefully attended to, simplicity being strictly enforced, and all the exciting causes, especially the use of spirituous liquors, and exposure of the face to the heat of the fire or to harsh winds, carefully avoided. The following case illustrates these views.

February 6, 1850. Mr. —, aged 43, came up to town from the North of Ireland, to consult me for an eruption on his face. It first appeared about two years since, at the side of his nose, in the form of small pimples, which were very hard and painful, and after some time broke, but without giving exit to much matter, and left a crimson stain on the skin. From that time the crimson colour has been gradually extending over his face, and now occupies the nose, both cheeks, the chin, and the forehead, disfiguring him very much. The surface is raised and thickened, and pustules are constantly forming on it; it is also attended with constant itching, especially



when he is heated from any cause, and is so painful, that he dreads the operation of shaving. He states that since he was fifteen years of age, he has always been liable to the occasional appearance of what he terms "little boils" on the face; but he ascribes the origin of the present attack to prolonged anxiety of mind, at a time of the year when the weather was very harsh, and when he was compelled to be constantly in the open air. He has always lived temperately, both as regards eating and drinking, and he has never suffered from dyspepsia in any form, nor from constipation. I ordered him to take every night, at bed-time, two ounces of a mixture consisting of twelve grains of the iodide of potassium dissolved in twelve fluid ounces of decoction of fresh elm-bark, and to smear the face thickly before lying down in bed with the following ointment: white precipitate ointment<sup>a</sup>, two drachms; simple cerate, six drachms; oil of bitter almonds, three minims. The ointment was to be washed off in the morning with a lotion containing half a drachm of carbonate of soda in eight fluid ounces of elder-flower water. He was also ordered to use soda instead of soap for washing his face, even when shaving; and to avoid exposure to harsh winds, or to the heat of the fire, as much as possible. On June 26, 1850, this gentleman, happening to be in town, called on me, to let me see the amendment that had taken place in his face; it was at that time almost perfectly free from the redness, and there were but one or two pustules of acne visible on the forehead and chin. I directed him still to persist in the treatment I had laid down for him; and in January of this year he wrote to me, stating that he considered himself to be quite recovered.

*Acne indurata*, though in nearly every instance apparently an aggravated form of acne rosacea, in some cases presents an *indurated* and *tuberculated* character from its first

<sup>a</sup> This ointment has been omitted from the new edition of the Dublin Pharmacopœia; it was of the same strength as that of London and Edinburgh, containing a drachm of the white precipitate to an ounce and a half of lard.

appearance. In the latter case it is usually confined to the nose and one cheek, while in the former it may extend to the whole face. It is characterized by the eruption being much elevated over the surface of the skin, which is of a dark rose-red hue, and consisting of conoidal pustules about the size of a pea, extremely hard and tuberculated, and presenting minute points of suppuration at the apex. These pustules are not very painful to the touch; they do not scab over, but whenever they mature and burst they leave a cicatrix or pit resembling that of small-pox. It is of a very obstinate character, and in some cases seems to defy all remedial measures. The following case exhibits the character of this eruption, and the remedies which I have found to be most successful in its treatment.

Michael Linehan, aged 20, a baker by trade, was admitted into Jervis-street Hospital, May 23, 1850. He suffers from an eruption on the left side of his nose and left cheek, which has been there for more than eight months, and which he believes was originally produced by the irritation of the fine particles of flour getting up into his nostrils, and compelling him constantly to pick and rub them. There are three tubercles on the ala of the the nose, and two on the cheek, each about the size of a large pea, of a deep red colour, with minute pustular points; they are extremely hard, coalesce at the base, are not very painful to the touch, and do not cause much annoyance from itching, unless when the face is heated. The skin of the entire nose and of the left cheek is of a red-rose colour, thickened, with stellated superficial veins all over it, and several spots of acne simplex. It is also pitted with the bluish cicatrices of old pustules. The sebaceous glands on the rest of the face are enlarged, and most of them present black points. His bowels have been latterly much constipated, and when they are so he has remarked that the face is always worse. He has used various local applications to the eruption, and also taken a great deal of medicine, but the disease has continued to progress steadily, though slowly.



The appearance of the face at first sight, together with the patient's youth, rendered the eruption in his case liable to be mistaken for lupus; but the absence of any tendency to ulceration, the history of the progress of the disease, and its still decidedly pustular character, served to diagnose it from that affection.

He was treated by the abstraction of four ounces of blood, by cupping, from the nape of the neck, once a week; by the daily use of saline cathartics; by the application, twice a day, of an ointment containing fifteen grains of the iodide of sulphur, gradually increased to half a drachm, to the ounce of lard, and the employment, before each application of the ointment, of an alkaline wash,—half a drachm of carbonate of soda to sixteen fluid ounces of distilled water. He was also kept confined to the wards of the hospital. On the 8th of August he was sufficiently well to leave the hospital, but there were some hardness, swelling, and redness still left, which did not, however, seem to have increased in three months afterwards, when he presented himself at the dispensary, although he had used no remedial measures in the interval.

**IMPETIGO.**—In my essay on diseases of the scalp, to which I have already referred, I described the characters of this eruption; it rarely appears on the face unless when it spreads there from the scalp, which it very generally does in children and young persons.

In its early stages it is of a highly inflammatory character, and is much aggravated should stimulant or astringent applications be used to it. Local bleeding, by leeches behind the ears, the daily administration of mild saline cathartics, and the employment of alkaline ointments (half a drachm of the bicarbonate of soda and a fluid drachm of glycerine to the ounce of spermaceti cerate), and weak alkaline washes (half a drachm of the carbonate of soda and half a fluid ounce of glycerine to

the pint of elder-flower water), constitute the plan of treatment I have found most beneficial, while it retains its inflammatory character. In the chronic stages, I have derived most benefit from minute doses of the iodide of mercury internally, and from the local application of the sulphate of iron, in the form of ointment, in the proportion of from two to five grains of the dried sulphate to the ounce of cerate, employing, at the same time, the alkaline wash above described. In children of a sanguine temperament I have found this ointment too stimulating, even in the most chronic stages of the disease; and with them I have derived most benefit from the use of the acetate of zinc lotion, twelve grains of the salt and two drachms of glycerine to eight ounces of distilled water. This treatment I have also used latterly, with excellent effect, in chronic impetigo of the scalp.

LICHEN.—Of the many forms of this eruption described by dermatologists, all are occasionally met with on the face; but that which is most generally developed there is lichen agrius. It is a *papular* eruption, and appears usually on the forehead, commencing as a mass of minute papules, clustered together on a red patch of skin. They are usually very numerous, shining and acuminate; they do not enlarge in size, but, being attended with much inflammation, lymph is effused at their base into the subcutaneous areolar tissue, and the portion of the skin on which they are situated becomes, consequently, swollen and hard. As the disease advances, the papules ulcerate at their apex, and give exit to a sanious ichor, which concretes into thin, friable, yellowish scabs; the skin becomes more and more inflamed, *thicker*, dry, and rugose, and pustules of acne or impetigo appear mixed with the papules of lichen, or on the surrounding skin. The first appearance of lichen agrius is often preceded by a sharp feverish attack, which ceases as soon as the eruption appears; but the affected part is throughout attended



with heat, intolerable itching, and occasionally severe tingling pain, all of which are much aggravated by any excitement of the circulation, even by the warmth of bed.

Lichen agrius occurs, in my experience, much more frequently in males than in females. The most usual causes by which it is excited are local irritants applied to the face. I have in some cases seen it produced by the pressure on the forehead of a tight hat, by harsh dry winds, and by solar heat or that arising from a very hot fire: the latter is a not unfrequent cause of the eruption in some trades, such as blacksmiths, furnace men, &c. Its diagnosis is generally very easy; being the only *papular* eruption peculiar to the face, it is not liable to be confounded with any of the other eruptions which appear there, but an obscurity sometimes arises from the development of pustules of acne or impetigo. A careful examination, however, with a pocket lens, will always show the primitive character of the papules; and the peculiar change in the skin on which they exist, as I have above described it, will aid the diagnosis.

The early stages of this eruption require the repeated application of leeches as near the seat of the disease as possible, the use of active purgatives, and the tepid fresh-water bath every second or third day. I have found the following ointment very successful in its commencement:—Acetate of zinc, two grains; cold cream<sup>a</sup>, an ounce; chloroform, four minims: the alkaline soda wash being used at the same time. When the disease becomes chronic, the application of leeches, and the use of occasional saline purgatives, are still of service, but

<sup>a</sup> Cold cream not being officinal, medical men are sometimes puzzled how to designate it in their prescriptions; many, I know, use the barbarous Latin, *Cremor frigidus*. The term employed by the older pharmacologists for this preparation was *Ceratum Galeni*, and this is a convenient appellation if it were generally understood by compounders, but that it is not, I have had experience, for in more than one instance in which I prescribed it, *gall* ointment was dispensed.

the employment of iodine internally is now required. I generally prescribe it with the decoction of elm-bark, in the form I have mentioned when describing the treatment of acne; but in persons of a weakly habit of body, or in the debilitated, I have derived much benefit from the iodide of iron, given in the form of syrup or of pills. I have found iodide of sulphur the best local application in this stage of the disease, the form which I ordinarily prescribe, being twenty grains of the iodide to an ounce of white wax ointment, to which six minims of chloroform are added.

J. B., aged 46, a blacksmith, consulted me in March, 1849, for an eruption on his forehead. The entire skin of this part of the face was of a dark red colour, thickened, elevated, rugose, harsh, and covered with minute papulæ thickly set: small pustules being also scattered over the surface. In parts it was covered with yellowish scabs, which readily fell off, and permitted the escape of a thin sanious fluid. He stated that the eruption first appeared more than two years before, and he ascribed its origin to his being compelled frequently, when heated much from the fire, to go out into the open air; he thought also that he had taken cold at the same time from this cause, as he was obliged to remain in bed for two or three days just previously to the appearance of the eruption, in consequence of a feverish attack attended with sickness of stomach. Ever since its first appearance it had caused him great suffering from the heat and pain which exist in the part; and the itching has been at times so intolerable, that he has torn it repeatedly with his nails until it bled. He said that he had used various local applications, but they seemed only to aggravate the disease. I ordered six leeches to be applied at the margins of the affected surface, and the following ointment to be smeared over the eruption three times a day, the parts having been sponged well with the alkaline soda wash, without the glycerine, previously to each application:—iodide of sulphur, twenty grains; white wax ointment, an ounce;



chloroform, six minims. He was also directed to take two grains of the iodide of potassium three times a day, in a wine-glassful of decoction of elm-bark. This plan of treatment was continued for somewhat more than two months, when, as he was much improved, the dose of the iodide was gradually decreased, and in another month all the remedies were discontinued, there being nothing but a slight stain of the skin left, which has since worn away completely, and he is at present quite free from any mark of the disease.

HERPES.—Two varieties of this eruption appear on the face, herpes circinnatus and herpes labialis. The former, popularly known as the *ringworm*, is essentially a disease of youth, rarely appearing after the age of puberty. It is characterized by an eruption of minute vesicles on a slightly inflamed base, which appear in a circular form, with round patches of healthy skin in the centre. Its first appearance is sometimes attended with a slight feverish attack, accompanied by heat and tingling of the part of the skin about to be affected. The vesicles usually break about the third or fourth day, and dry up into a small scab or scale, which bears much resemblance to an exfoliation of the cuticle. In some instances the disease thus terminates in ten days or a fortnight; but in others it assumes a chronic character, spreading by the circumference, fresh vesicles springing up at the outer edge, while the exfoliation still continues from the part first affected, but the central patch of sound skin is rarely engaged. I have not unfrequently seen instances in which ringworm had thus lasted for many months, a single circle often covering the entire of one cheek: two or three other patches having also formed on other parts of the face. This form of herpes agrees, I think, in its essential characters, with the variety I have described in a previous essay in this Journal<sup>a</sup>, under the name of Herpes capitis, any difference

<sup>a</sup> New Series, vol. vi. p. 33.

that exists between them being dependent on the peculiarities caused in the latter from its situation on the hairy scalp. I have seen numerous instances to convince me of its contagious nature, although this opinion is, I know, different from that of many of our best dermatologists. Some of these instances I have already published in this Journal<sup>a</sup>.

The treatment of herpes circinnatus in its milder forms is very simple, a saline purgative being in general the only medicine that is required; should the local inflammation, however, be high, the application of the compound lead-wash, warmed, will be found of use. When it assumes the chronic character, the constitutional treatment I have laid down in my essay on eruptions of the scalp for the disease when it appears there, will be required. The local application from which I have derived most benefit is the *brown citrine ointment*<sup>b</sup>, diluted with from three to four parts of white wax ointment, the alkaline wash with glycerine being employed at the same time. Whether the disease be acute or chronic, the face should be exposed to the air as little as possible, and specially guarded from the heat of the sun or of the fire.

*Herpes labialis* is an eruption of short duration, which appears at the angles of the mouth or on the lips; it is usually a concomitant of ordinary colds, appearing on their decline. By most writers it is described as being more or less connected with derangement of the stomach or digestive organs, but I must confess that I have never been able to see this connexion. It generally runs its course in four or five days, but, when irritated by picking or by the motion of the lips, it may last for double that time. If a strong spirituous lotion—and I have found nothing answer so well as Eau de Cologne—be constantly applied to the part on which it is about to appear, before the vesicles are developed, the further progress of the eruption may in most instances be prevented.

<sup>a</sup> New Series, vol. viii. p. 164.

<sup>b</sup> See my work on Medicines, p. 400.



ECZEMA.—There are two forms of this eruption described as affecting the face, namely, eczema rubrum and eczema chronicum, both of them exceedingly obstinate in their nature, and attended with great suffering and annoyance to the patient. They are liable to appear at any time of life, from the earliest infancy to the most advanced old age; the former, however, is more often met with in young persons, and the latter in the middle periods of life, and in the old. As eczema chronicum, nevertheless, is in all cases, so far as my experience enables me to judge, but an advanced stage of eczema simplex or of eczema rubrum,—on the face always of the latter,—I shall describe both together.

The outbreak of the eruption is preceded in young persons by a sharp attack of fever, attended with burning heat and soreness of the part about to be affected, which lasts for two or three days: in adults these symptoms are very trifling. Numerous minute vesicles then appear, closely crowded together, on a highly inflamed patch of the cuticular surface, characterized by acute burning pain and intense itching. These vesicles do not mature, but burst usually on the day or day but one after their first appearance, giving exit to an abundant irritating serous fluid, which dries into soft thin scales. In some few instances the disease does not proceed beyond this stage, the cuticle of the part affected gradually exfoliates, and recovery takes place; but more generally the inflammation of the surface goes on increasing, fresh crops of vesicles continuously appear, the discharge becomes more copious, and of a more acrid character, exciting irritation of those portions of the neighbouring healthy skin over which it may flow, and the itching and painful tingling are most intense, scarcely allowing the patient a moment's rest, night or day. The skin which is the seat of the eruption becomes swollen as the disease advances, the cuticle exfoliates with the soft scabs, or is torn off by scratching, and deep bright red cracks appear all over it, from which a sanious, often bloody discharge ex-

udes. The sufferings caused by eczema, when it reaches this stage, can scarcely be described; suffice it to say, that they totally incapacitate adults affected with the disease from following any trade or employment.

Whether eczema rubrum attacks young or old persons, when it assumes a chronic character I regard it as the most intractable of the eruptions which appear on the face. It not unfrequently lasts for years (in one case, regarding which I was lately consulted, it had been of upwards of twenty-five years' duration), and is rarely cured under several months' treatment.

The most usual part of the face on which it appears in infants and young children is the forehead, to which it ordinarily spreads from the scalp, and, unlike most of the other eruptive diseases, is much more obstinate there than on its primary situation. This I believe to depend on the greater delicacy of the skin of the face permitting those cracks and fissures, to which the rebellious nature of the disease seems to me to be chiefly due, to form more easily. In adults, it occurs with greater frequency on the nose and lips, but in many cases spreads also to the forehead and cheeks.

As regards the causation of eczema, I have but few remarks to offer; it may, undoubtedly, be excited by any of those causes which I have enumerated at the commencement of these observations, but I have very rarely been able to trace a distinct connexion between the appearance of the eruption and any of them. I have certainly seen the disease most frequently in persons who have been obliged, in their ordinary occupation, to sit in close rooms, with the head much stooped.

The diagnosis of eczema, in its chronic form, is generally attended with much difficulty. In its early stages the eruption is sufficiently characterized by its vesicular character. Herpes, the only other affection of the skin of the face with which, from being of the same class, it is likely to be confounded, occurs, as I have described when speaking of it, in circular patches,



or affects the mouth and lips alone ; while acute eczema is irregularly spread, in the form of distinctly separated vesicles on a highly inflamed base, and is not confined to any special locality. When eczema becomes chronic, however, it is often very difficult to diagnose it from lichen : the chief points of difference are the papular, and therefore *raised* character of the latter, the attendant serous discharge being evidently caused by the local irritation to which its presence gives rise, and the absence of those *red cracks* in the skin which so invariably accompany eczema. Some importance must be attached to the diagnosis between the two affections, especially as regards the opinion to be given as to the probable duration of the disease, eczema being much more intractable than lichen.

In young persons, the early stages of this eruption require to be treated on strictly antiphlogistic principles. I have generally succeeded in preventing the disease from becoming chronic by following out the plan of treatment proposed in my paper on diseases of the scalp, already so frequently referred to ; but where the children are of a full habit of body, or the inflammation runs high, the application of leeches to the temples, or behind the ears should not be neglected. When the eruption becomes at all chronic, in addition to the constitutional treatment by the iodide of mercury and hydrargyrum cum cretâ as there proposed, I have derived much benefit from the local employment of an ointment containing tannin and glycerine, in the proportions of ten grains of the former and half a drachm of the latter, to an ounce of white wax ointment, to which four minims of chloroform have been added ;—alkaline lotions being at the same time used. In adults, the inflammatory nature of the disease is more apparent than real even from its first appearance, a fact which is sufficiently proved by its occurrence most frequently in persons of a broken-down habit of body, or in those who have been much debilitated from any cause. A more stimulant plan of treatment as regards local applications, and the internal administration of tonic alteratives,

are consequently required with them, from the commencement of the eruption. The iodide of sulphur is the local remedy which I have seen most productive of good, applied in the form of an ointment, containing from ten to twelve grains to the ounce of white wax ointment, to which from eight to fifteen drops of chloroform have been added. I may here mention that I have used chloroform very extensively for the last year and a half in the treatment of skin diseases, and that I have found it of especial service in all eruptions which are attended with much itching, provided they are not accompanied by acute inflammation of the part affected. The internal remedy that I have prescribed with most effect in the treatment of chronic eczema rubrum is the ioduretted iodide of potassium and arsenic, in a form slightly modified from that I first proposed in my *Essay on Scaly Diseases of the Skin in this Journal*<sup>a</sup>, as I have mentioned, in the third edition of my work on *Medicines*<sup>b</sup>. The alkaline lotion with glycerine, and the substitution of the carbonate of soda for soap, I recommend in all cases.

P. B., aged 32, a law clerk, consulted me on the 21st of January, 1850, for an affection of his nose and lips. Between six and seven years ago, he says, the eruption first appeared on his nose, in the form of small watery pimples, which were attended with much tingling and burning pain; these soon dried up and disappeared, but were in a short time followed by a fresh crop, which were more painful and itching, lasted for a longer time, and discharged a great quantity of a watery fluid. The disease in a short time extended to the lips, and appeared also about a year since on the calves of his legs, and on the backs of his hands and wrists. His sufferings he describes as being most intense from the pain and itching, especially at night when he gets warm in bed, almost completely depriving him of rest, and preventing him from sitting for more than a few moments in a room with a fire in it. Exposure to dry, harsh

<sup>a</sup> New Series, vol. viii. p. 351.<sup>b</sup> Page 428.



winds, and to the heat of the sun, also, equally aggravated the disease. His general bodily health has within the last year been much deteriorated: his chief symptoms being debility and loss of appetite. The disease now extends to the greater part of his face; the lips are much swollen, protruding, fissured with deep chaps from which an acrid serosity constantly exudes, and bleed on the slightest irritation; the nose is covered with thin, friable, yellowish-brown scabs, between which are bright red cracks, that give exit to a discharge of a similar character to that from the lips; and the forehead, especially between the eyebrows, presents the same appearance. The disease is also present in a most aggravated form on his wrists, the backs of his hands, and the calves of his legs.

He was ordered at first to take a fresh-water tepid bath twice a week, and to live most abstemiously, as regarded both eating and drinking; his diet to consist chiefly of milk and farinaceous food, with a small quantity of the plainest fresh meat. The only local application ordered was a weak carbonate of soda wash, twenty grains to the pint of rain-water; and a tonic antacid mixture, containing quassia, cascarilla, and Brandish's alkaline solution, was prescribed for him. He was also directed to expose the face as little as possible, and to substitute soda for soap when washing. This plan of treatment was continued until the beginning of April, with excellent effect as regarded his general health, but with scarcely any perceptible influence on the eruption. He was at this time ordered an ointment containing twenty grains of the iodide of lead, an ounce of cerate, and four minims of oil of bitter almonds; and to take two grains of iodide of potassium three times a day, in two ounces of decoction of fresh elm-bark. The baths were still continued, and the same directions as to diet enforced. These remedies were persisted in until the 31st of August, at which time the eruption on the face was but little, if at all improved, and it was decidedly worse on the extremities. I now prescribed for him a mixture containing eighty

minims of arsenical solution, sixteen grains of iodide of potassium, and four grains of iodine, in two fluid ounces of syrup, of which he was to take a tea-spoonful three times a day in two ounces of decoction of elm-bark; and the following ointment: iodide of sulphur, twelve grains, simple cerate, an ounce, and oil of bitter almonds, four minims. On the 24th of September he was much improved, but he thought the ointment smarted him. The iodide of sulphur was therefore reduced to ten grains; white wax ointment substituted for the cerate; and fifteen minims of chloroform for the oil of bitter almonds. From this time he improved rapidly, the itching and pain were almost at once subdued, and in the beginning of December the face was quite well; up to the middle of last March he continued free from any annoyance, and there was scarcely a stain of the disease apparent; but towards the end of that month there was a slight return of the eruption, after exposure to the harsh winds which then prevailed. This very frequently occurs with most eruptions of the face in the spring or autumn after they have been cured, but such relapses are invariably very amenable to treatment.

Our patients should, in all cases, be warned of their liability to the recurrence of eruptive diseases, no matter on what part of the cutaneous surface they may have been present, and of the necessity, under such circumstances, of an *immediate* recourse to remedial measures. Such liability is also an indication to the practitioner that the constitutional treatment should be continued for some time after the disappearance of the affection.

The other eruptions of the face which I have enumerated in the commencement of this paper, I shall describe in a future number of this Journal.



ART. XII.—*An Account of three fatal Cases in which an accidental Injury to the Brain was undetected during Life.*

[THE following cases are especially interesting as an illustration of the slight evidence which a rapidly fatal injury to the brain may present until a short time before death. In all three there was no idea in the first instance of injury to the organ; and the cause of death was unsuspected until revealed on *post mortem* examination. Their history, too, offers a practical commentary on the necessity of the most careful examination in every case in which, from the position of a wound, or the nature of the instrument with which it may have been inflicted, the brain might possibly be penetrated: we have, therefore, thought that their connected publication would prove a valuable contribution to surgical literature.—ED.]

CASE I.—By GEORGE ANDERSON, M.D., Surgeon 12th Royal Lancers:

Trumpeter Henry Grainger, aged thirty years, was admitted into hospital on 27th February, 1851; he was seen at the morning visit, at 10 o'clock, by the assistant surgeon, Dr. George, who found him in bed, and considered that his ideas were somewhat confused, but attributed this, in part, to indulgence in drink the previous night (the 26th), as, on questioning the patient as to what was the matter with him, he said that on the previous evening he had been fencing with a walking cane with some of his companions, and that he had received a blow on the nose, or a thrust from a cane in the face. On examination, a small punctured wound was observed on the left ala of the nose, which did not appear larger than the wound arising from a leech-bite; and at this time, though somewhat taciturn, he appeared perfectly sensible, and answered readily the questions put to him.

Fomentations to the wounded part, and aperient medicines, were the remedies prescribed, and no unfavourable symptoms supervened during that day.

At the morning visit on the 28th, he was considered as not better, nor as sensibly worse, though there was no doubt that he was at this time labouring under a considerable degree of stupor; yet no alarming head symptoms were manifest, and, consequently, no particular examination of the parts where the wound existed was made, and the only additional remedy prescribed was a cold lead lotion to the head and face, and the purgative medicine was repeated.

About 6 o'clock on the same evening I was called by the hospital sergeant, who stated to me that Grainger was much worse; and though Dr. George informed me, at muster parade in the forenoon, that he could not account for the continued symptoms of drowsiness and stupor in his case, I certainly did not suspect, either *before* or *after* seeing the patient, that there had been any wound of the brain, much less that a foreign body had penetrated to that organ, and was firmly impacted in the patient's skull. When I first saw him this afternoon he was struggling violently with the attendants, who required to use force to keep him in bed; his breathing was stertorous, and he was puffing with the lips; the right eye was fully expanded or staring, and its pupil greatly contracted; ptosis of the left eye-lid existed, and on raising the eye-lid the pupil was found to be extremely dilated. He had passed a large quantity of urine in bed, and his bowels had been open since morning.

On questioning him, or rather calling him sharply by name, he would raise himself into the sitting posture, throw his arms about, and strike at, or take firm hold of any object within his reach.

I had considerable doubt and difficulty in determining on the immediate measures to be adopted, the history of the case being to me quite obscure, and the symptoms being urgent and most unfavourable. Though the pulse was not full or bounding, the action of the temporal arteries was exaggerated, and, therefore, looking only to present symptoms, I opened the right temporal



artery, and though this was done effectually, I only obtained about a couple of ounces of blood from it. I then opened a vein in the arm, but did not obtain much more blood in this way. A large turpentine enema was then administered, and grain doses of calomel were ordered every hour or half-hour. I left the hospital with very slender hopes that a fatal issue could be averted, and I had not been much more than half an hour in my room when I was called to the hospital, but before I reached it the patient had expired, after a violent convulsion attended with great discolouration of the countenance. The fatal event occurred at about a quarter past 8 o'clock on the evening of the 28th of February, 1851; and the features of the deceased appeared calm, and not distorted, when I saw the body.

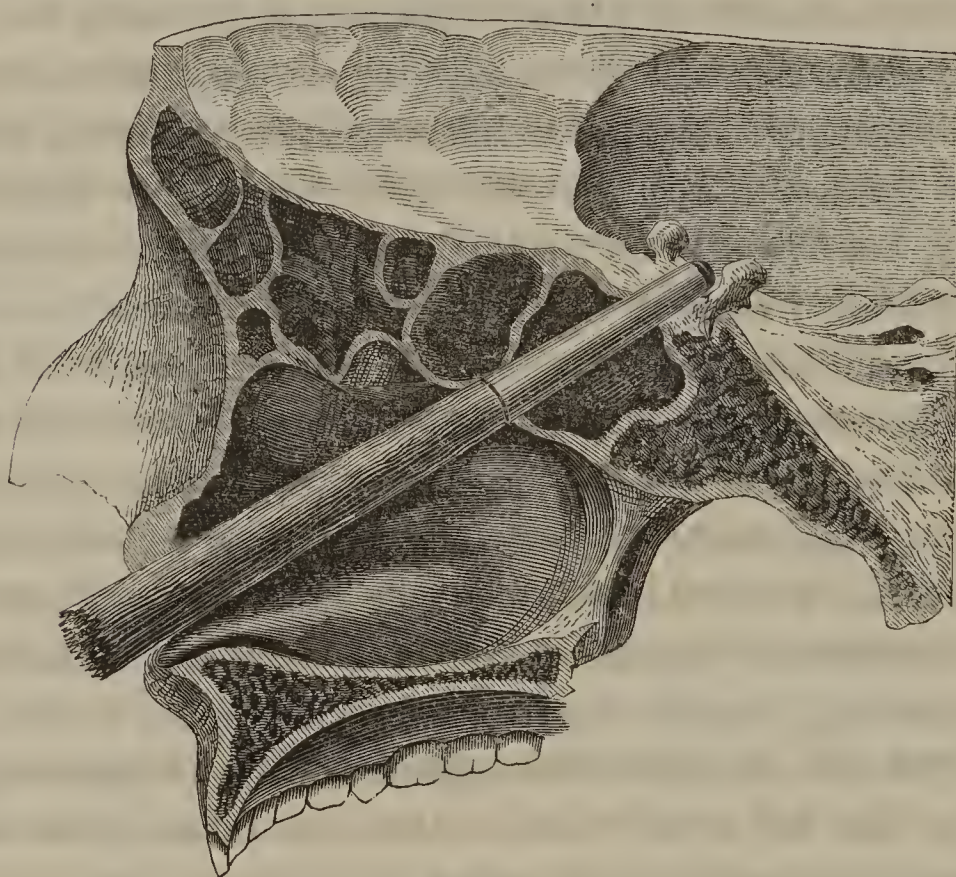
The autopsy took place sixty-three hours after death, on Monday, 3rd March. On removing the calvarium the dura mater presented nothing abnormal, but when it was removed a considerable degree of chronic arachnitis was presented, and the pia mater was found to be very vascular. After dividing the falx cerebri the anterior lobes were raised, and, gradually proceeding backwards, we had got as far as the division of the optic nerves, when the scalpel struck suddenly on a metallic point or substance directed obliquely upwards and backwards, and protruding into the cavity of the skull, close to the left side of the sella turcica of the sphenoid bone, and pressing or lying on the left optic nerve, or left side of the optic commissure.

The cause of the man's death was at once made manifest to myself and Drs. Carte and George, who were present at the examination, as the foreign body was evidently the brass point or ferule of a small walking-cane.

I did not proceed further in the examination, but reported the circumstances to the commanding officer, when a coroner's inquest was ordered to be held on the body.

In the course of the afternoon the coroner held the inquest, and Surgeon Porter, Jun., was the medical man ordered

by him to investigate into the cause of the soldier's death. I was present when Mr. Porter proceeded with the further examination of the brain, and the parts in connexion with the foreign body. On probing the nostril the end of a foreign body could be detected, and before it was removed by Mr. Porter from the situation it occupied in the skull, it was evident to all present at the examination that it was the broken end of a cane, of which the ferule or brass point presented itself in the inside of the skull, by the side of the posterior clinoid process of the sphenoid bone.



Dr. Carte afterwards made a section of the skull, by which the course of the stick, as is shown in the above wood-cut, was exhibited. The point of it had pierced the left ala of the nose, at the junction of the cartilage with the bone, taking a direction upwards, backwards, and a little inwards; in its course it grazed the inferior and middle turbinated bones, passed through the great cell in the body of the sphenoid, breaking off and carrying before it the posterior clinoid process, and finally impinging upon, but not rupturing the membranes covering



that portion of the anterior lobe of the brain in immediate relation to the optic nerve of the left side. Anatomically speaking, there was nothing to oppose the onward progress of the stick, for in fact it passed up the nostril, the only resisting part, after it entered the skin and cartilage, being the body of the sphenoid itself, which, in the present instance, was very slight, its walls affording almost no resistance, in consequence of their extreme thinness.

It is evident that, while fencing as he had described, the cane had accidentally struck the unfortunate man's face, probably from his own act in parrying the thrust, and that the point of it had entered through the left ala of the nose, passing obliquely upwards and backwards, until it emerged, as described above, by the side of the sella turcica. I should think that the cane had broken off *short* in the nose when it was being withdrawn by his assailant.

Mr. Porter appeared to be of opinion that the brain presented an inflamed appearance, but this may have been more apparent than real, and may in part be attributed to *post mortem* effects and exposure to the atmosphere, which latter had caused the blood in the vessels to assume a more vermilion appearance than it presented on the morning of the examination.

There can be little doubt if a detailed and accurate account of this unfortunate fencing match had been obtained at the time of the patient's admission into hospital, and the stick which inflicted the injury had been produced (which was done after the man's death, and shown to me), that the attention of the medical officer would have been directed to what he, without any further information than the patient's negative statement, considered only as a trivial puncture in the ala of the nose, and would have, undoubtedly, led him to ascertain that there was a foreign body impacted within the nostril, and, probably, passing backward so as to touch the brain.

I am inclined, however, to the opinion, that had all the above information been obtained at the time of the unfortunate

soldier's admission into hospital, the foreign body might not have been extracted from the situation it occupied in the man's skull, as it required considerable force to drive it with a punch and hammer, from within outwards, in the dead body; and if it had been extracted, the question arises, what chance was there of a fatal termination being averted.

CASE II.—By SIR PHILIP CRAMPTON, Bart., F. R. S., &c.

[When we were favoured by Dr. Anderson with the history of the foregoing case immediately after its occurrence, we wrote to Sir Philip Crampton to request the particulars of a somewhat similar one which we were aware had occurred in his practice many years ago, and, in reply, received from him the following letter, in which they are contained.—ED.]

*“ Merrion-square, March 27, 1851.*

“ MY DEAR SIR,—I have but very short notes of the case of wound of the brain to which you allude, but, such as they are, they are quite at your service.

“ In the winter of 1814 a gentleman of the name of M'Loughlin, a lieutenant in a Highland regiment, when running on a dark night to escape from a shower of rain, came rather violently in contact with an irritable old man, who made a thrust at him with an umbrella, the point of which struck him immediately beneath the left eye-brow. The rencontre took place on Essex-bridge; but the wound was attended with so little local pain or shock to the system, that Mr. M'Loughlin walked to my house in Dawson-street (a distance of at least half a mile), and having mentioned the occurrence, as one to which, however, he attached no importance, he begged of me to look at the wound on the eye-lid, which still continued to bleed slightly.

“ I found a wound of about three-fourths of an inch in length in the upper eye-lid, exactly in the seat of the deep fold which is formed in this part by the action of opening the eye and looking upwards. When the eye-ball was turned upwards there was no appearance of wound, but when the eye-lid was drawn downwards the wound gaped and showed the



conjunctiva, which still completely covered the upper portion of the ball of the eye. The vision was quite unimpaired. The wound having been united by two points of suture, Mr. M'Loughlin took his leave, and walked to his lodgings in Grafton-street. I called on him on the following morning and found him at breakfast; he made no complaint but of some stiffness in the eye-lid. On the next morning at 7 o'clock, A. M., I was called to him in a hurry, and found him in strong convulsions, so strong that it was with difficulty two persons were able to keep him from working himself out of the bed. The convulsions continued with short intervals of coma until 8 or 9 o'clock in the evening, when he expired.

The *post mortem* examination was made at 10 o'clock on the following morning, by the desire of the coroner.

It was found that the brass ferule of the umbrella, nearly two inches in length, had penetrated through the orbital plate of the frontal bone, and was lodged in the substance of the left hemisphere of the brain; it was imbedded in a thin coagulum of blood, which extended into the left lateral ventricle; both ventricles contained a small quantity of bloody serosity. A portion of the os frontis, containing the perforated orbital plate, was deposited in the Museum of the College of Surgeons.

“ Very truly your's,

“ PHILIP CRAMPTON.

“ *To the Editor of the Dublin Quarterly  
Journal of Medical Science.*”

CASE III.—By JOSHUA PAYNTER, Esq., Surgeon of the 13th Light Dragoons.

[The account of this case, which, though not as complete in the details as the two previously related, is yet equally illustrative, has been procured for us through the kindness of Dr. Gibson, Surgeon of the 17th Lancers<sup>a</sup>.]

<sup>a</sup> The particulars were given in a letter from Mr. Paynter to Mr. Tuffnell, Surgeon to the City of Dublin Hospital.

“ The following case occurred in a soldier of the 77th regiment, in 1842, when I was assistant-surgeon in the Rifle Brigade; and by the desire of Dr. Burrell, then surgeon of the 77th, I made the examination after death.

“ The soldier was drunk and put in the guard-room, and the following morning was sent to hospital with some slight complaint, either headach or some other complaint not particularly urgent. I think he was in hospital one or two days; and, if I mistake not, after having taken a dose of aperient medicine, was walking about, when, on a sudden, he was attacked with symptoms resembling apoplexy, and died in a few minutes.

“ *Post Mortem Examination.*—I must previously state, that there was no external appearance to indicate any injury having taken place. There was nothing abnormal perceived until the dura-mater was removed, when, on raising up the brain, a collection of puriform matter was found in the left anterior lobe, at its inferior surface, where it rests on the left orbital plate of the frontal bone, and in it a piece of a tobacco-pipe, about two inches in length, was seen penetrating the substance of the brain. The piece of clay pipe was supported by the left eye-ball, having also as a support a circular hole in the left orbital plate; on further examination externally a much ecchymosed spot was found in the upper eye-lid, which proved to be a wound made by the piece of pipe, which had entered the orbit, passed through the orbital plate of the frontal bone, and thus caused death.

“ The inference drawn, of course, was, that the man going home drunk with a pipe in his hand, must have fallen, and in the act thrust the tobacco pipe into the orbit and fractured the orbital plate as before stated. No wound was apparent, nor do I think any external appearance of black eye, as the upper lid being drawn up by the levator palpebræ hid the opening from being seen.”



## PART II.

### REVIEWS AND BIBLIOGRAPHICAL NOTICES.

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*The Nature and Cure of Consumption, Indigestion, Scrofula, and Nervous Affections.* By G. CALVERT HOLLAND, M.D., lately Physician to the Sheffield General Infirmary. London: Orr & Co. 1850. 8vo. pp. 208.

*Cases illustrative of the Cure of Consumption and Indigestion.* By G. CALVERT HOLLAND, M.D., &c. London: Orr & Co. 1850. 16mo. pp. 104.

*Practical Suggestions for the Prevention of Consumption.* By G. CALVERT HOLLAND, M.D., &c. London: Orr & Co. 1850. 8vo. pp. 143.

It affords us no satisfaction to bring these books under the notice of our readers. Had we consulted our private tastes or the interest and reputation of British medicine, we should have given them only the condemnation of obscurity; but the author possesses external claims to our notice, of such a character that we feel unable to pass them by wholly without remark, particularly as these same claims are liable to influence the unwary to buy them, and the inexperienced to be misled by their statements: for Dr. Holland is a regularly educated physician, has held the appointment of physician to a large provincial hospital in England, and at an earlier part of his medical career wrote books of some merit. Heu, quantum mutatus! Dr. Holland still writes books, nearly as frequently as Jullien composes a quadrille, or James a novel; but their merit, like his new medical system, has gradually dwindled lower and lower, until it has at last become an infinitesimal quantity. It gives us a real regret, and no satisfaction, we repeat, to bring forward, only to censure, these treatises. We have met with the author in a nobler field than that of open empiricism; we thought his sound medical

education, and the possession of the honourable distinction of an Edinburgh degree, and of an important public appointment, would have saved him from this recklessly eccentric course, and have preserved medical science from those ever-ready sneers he has now provoked. And, we confess to it, that we required full proof of the backsliding ere we condemned. It was not until the evidence was showered upon us with a characteristic profusion, nor until, in the "Cases of the Cure of Consumption and Indigestion," the proofs of defection became overwhelming in force, that we fairly gave up the author as lost to medicine, lost to reason. Even then in no rejoicing mood did we come to our conclusion. Rather, in spite of Dr. Holland's contrary conceptions of his critics, we were induced to exclaim, with Othello,

"But yet the *pity* of it, Iago:—O Iago, the *pity* of it, Iago!"

Dr. Holland's medical doctrines are those of exclusive solidism. This is sufficient for their condemnation. In the present advanced state of medical science, we shall spare ourselves the trouble of proving to our readers that there are diseases which do *not* own the nerves as their cause; that all the functions of the animal system are *not* performed by and through the nerves. It would be as profitable, and much more pleasant, to prove that Gulliver did *not* really travel out of Swift's brain. All we have to do with this matter is to give in evidence that these are really the author's views. One quotation will suffice. In the preface to the first of the three treatises at the head of this article we find the following:—"He [the author] has endeavoured to prove, in opposition to the doctrines of physiologists, that all the phenomena of life, occurring either in health or disease, originate in the widely pervading influence of nervous matter; or, in other words, that every vital manifestation, whether in connexion with digestion, circulation, absorption, nutrition, or secretion, is to be traced to the unceasing agency of the nerves. They enable every organ to exercise the office for which it is peculiarly fitted by its structure; they alone impart to all tissues the principle in virtue of which these perform their part in the mysterious scheme of the animal economy." This is, as Dr. Holland remarks, in opposition to the doctrines of physiologists. So complacently does our author, here and in other places, remark upon the disagreement between his own doctrines and those of physiologists, that we verily believe he has a pleasant little hypothesis nestled within his bosom,—that they are therefore true! But our author's doctrines are the same in their actual basis with those of the



times of Hoffman and Cullen, broached and only maintained during the infancy of physiological and pathological inquiry. We are unprepared to ignore the researches of Andral and Gavarret, Becquerel and Rodier, Prout and Liebig, Simon and Mulder; we are unprepared to bow down to Dr. Holland's idol. "There is but one system, the nervous; and I, Dr. Holland, am its prophet," will scarcely compel us to forget the first letters of medicine.

The difficulty is to see how the author stumbled upon this fancy. Here again we must let him speak for himself. He informs us "that he has for many years devoted his attention, *almost exclusively*, to the investigation of the functions of the nervous system, and some of the results of his researches have been given to the world in two separate treatises." This explanation suffices us. We thought it a singular phenomenon that a person of ordinary understanding should run into such blunders as Dr. Holland; but when we find that, not content with having paid almost exclusive attention to one class of functions, he stereotyped his convictions and sealed his errors by writing "two separate treatises," containing the results of his so-called researches, the difficulty becomes plain. To commit an error, and write a book in its defence, is a combination that seals all argument.

Not to dwell longer upon the unfruitful subject of shallow hypothesis, and ill-connected and worse observed facts in illustration thereof, such as we find in the larger Treatise upon Consumption, Scrofula, &c., we shall now very shortly draw attention to the small, but by no means unpretending book which stands second upon the list. Were we dealing with a respectable physician, content to practise the rules and general modes of conduct of legitimate medicine, we should feel ourselves called upon to ask, Why does the book exist at all? Why, as is most meet, are not the cases incorporated with the doctrinal treatise, in proof of the author's arguments? Why entitled "Cases of the *Cure* of Consumption and Indigestion"?—as if the cure of the former disease were an every-day matter with Dr. Holland, and as if it were admissible, *quoad* curability, into the same category with the latter disease. But these are the easily recognised tricks of the professed quack; we pass them by. Conscious that his usual productions are "verba," and verba only, he has in this instance chosen the unostentatious motto, "res non verba." Dr. Holland should have left the "res" alone. As long as he dealt in mere argument, however ill-founded, hypotheses of the nervous functions, however contrary to known facts, the author might have escaped contempt.

Great men have been unsuccessful in this kind of manufacture. We might have deplored that he had not given his attention more fully to the observation of disease, but we should have only gently hinted at his possession of a perhaps "too discursive intellect," strong powers of imagination, and so-forth; but in this small volume he has given us cases, given us the means of gauging his knowledge of diagnosis, shown us what evidence he thinks valid to prove certain therapeutical effects; finally, he has enabled us to demonstrate that he is determined, like his brethren in quackery, to inflict every possible injury upon the body he has so recently deserted.

The preface to this most precious production opens thus: "In the relation of the following cases I have departed, in some degree, from the practice usually adopted by medical writers. I have frequently entered into a minute description of the symptoms, the general character of the constitution, and the probable causes of its derangement, whether exciting or predisposing, and have endeavoured to explain the physiological action of the remedies." What does Dr. Holland imagine medical authors write about? The north-west passage?—The overland route? We were innocent enough to think that the consideration of the symptoms of disease, the constitution of the patient, the causes exciting or predisposing, and the action of remedies, constituted almost the whole of the science and art of medicine! We must admit that its professors are by no means always, or often, perfect observers of disease, still less often sound reasoners upon what may have been even well observed, but we never doubted what they observed, upon what they reasoned; the object in view appeared clear enough in all cases. What then does Dr. Holland mean? This, and this only, that, as it happens to be the worst thing that can be said of the professors of an art, that they are ignorant of the objects of that art, he could write nothing that suited his own situation better than the observation we have quoted. We do not believe that the works of Culverwell and Morrison contain any one passage exhibiting an equally unabashed assurance, an equally unmitigated falsehood. It is almost impossible to conceive any man of common understanding or common honesty prefacing a book with the remark, that medical men do not study or write about medicine!

The first case illustrative of the cure and treatment of phthisis is a young lady (most of Dr. Holland's book-patients are young *ladies*) sixteen years of age. She had menstruated at 14, but only twice afterwards; respiration frequent, and much hurried on exertion; she had been troubled with a cough



for about two years, but which generally left her *during the summer months*, accompanied with *scarcely any expectoration*; the respiratory murmur was feeble, but heard throughout the chest; bowels torpid; appetite impaired. Two members of the family (how related not stated) had died of consumption. Dr. Holland has told us of the imperfections of the investigations conducted by physicians; here he gives us a case to show how he proceeds to form a judgment. We wish a little more aid from him: we do not perceive a symptom or a sign of phthisis! An occasional cough, without expectoration, no hemoptysis, or pains in the side, respiratory murmur feeble, but heard throughout the chest (clever Dr. Holland!), in a non-menstruating girl of 16, signify phthisis! But our author is not without a loophole. He tells us pleasantly in the preface, which only the critics read, that "several of the cases are not *strictly* those of consumption nor of indigestion," which this worthy logician thinks "no well-grounded objection to the propriety of their introduction" in a book emblazoned, "Cases of the Cure of Consumption and Indigestion." In this instance, at least, Dr. Holland's cunning has failed him; the word "consumption" too often occurs to leave any doubt as to his opinion; in fact, the whole case is a little treatise on phthisis. We shall leave our readers to form their own opinion of the diagnosis; we pass on to the pathology. We are told that such cases proceed from "internal congestion of the lungs and abdominal viscera;" the blood leaves the extremities and surface of the body, and accumulates in the viscera by an inevitable effect. Every step in the march of phthisis is a morbid process, which attracts to *itself* an undue proportion of it (the blood), at the expense of every part of the animal system. (p. 19.) What a subtle spirit this phthisis must be,— a kind of morbid Archæus, which disposes the body as "itself" wills! It would be very interesting to know whether and how it causes the diminution of the blood-corpuscles, and other blood-changes which have been incontinently supposed to produce "itself." It would be equally desirable to know Dr. Holland's opinion as to the precise connexion of this wonderful visceral congestion, which he so easily *brushes* off with a little spinal friction, with these old phrases, "lesion of nutrition" and "lesion of secretion." This is a knot which none but himself could presume to untie. The local, as well as the general congestion<sup>a</sup>, we are told, will gradually increase at the expense of the superficial circulation.

<sup>a</sup> What does Dr. Holland mean by this? Has he discovered new vessels in which a "general congestion" can occur while the *superficial circulation* is diminished.

Dr. Holland must have seen a tubercular lung; has he ever seen one injected? We strongly recommend him to inject a healthy and a tubercular lung, because we think it probable that the result of the experiment would induce him to buy up the remaining copies of his book. He would find, what would be only extraordinary to himself, that in proportion to the amount of tubercular deposit would be his difficulty in injecting it; and that therefore his proposition must be only reversed to be an exposition of facts, namely, that *pari passu* with the progress of tubercular deposit is the diminution of the afflux of blood to the organ. Verily, a most clear and enlightened pathologist!

The treatment consisted in frictions, especially along the spine and over the abdomen and chest, by means of the flesh-brush, the use of the dumb bells, and cod-liver oil. These are approved remedies; Dr. Holland has shown discrimination in adopting the treatment suggested and practised by abler men. We only regret that they should have found so injudicious an advocate, whose wholesale recommendations are likely to prejudice thinking persons against their use. It is impossible to read the observations upon the case before us without seeing that the author reposes much greater confidence upon mechanical means to enlarge the thorax than they are justly entitled to; and though aware "that the capacity of the thorax gradually becomes contracted by the progress of serious disorganization of the lungs," he talks of means to arrest the progress of this contraction, and to enlarge the cavity of the chest, as unquestionably among the most important remedial measures to be employed under the *circumstances specified*. This is clearly a great error, and likely to produce the worst results. The author has greatly mistaken both the powers and the profitability of these agents; and, taken in connexion with the context, the remark, "that it is as much in our power to enlarge the capacity of the chest, and *consequently* to invigorate the functions of the pulmonary organs, as it is to develope and strengthen the muscles of any part of the body by exercise," is simply absurd, and contains its own contradiction.

Case II. is a boy, fourteen years of age, of strumous habit and emaciated. His chief symptoms were distressing cough, accompanied with very little expectoration. The mucous membrane of the eyes and nose was occasionally much inflamed, and discharged matter. The abdomen is stated to have been tumid, and the bowels constipated. The physical signs are thus given:—"Respiration was heard throughout the lungs, but somewhat imperfectly at the upper part of each lung." What



imperfection was noticed by Dr. Holland? Was the respiratory murmur feeble, prolonged, coarse, interrupted, or bronchial? Was there dull stroke-sound? Did Dr. Holland discover any rhonchi or any alteration of the voice? Here, too, no hemoptysis, no night sweats, no hereditary predisposition, are noted. Do the records of medicine contain a case of phthisis whose diagnosis rested upon "*somewhat* imperfect respiration of the upper part of *each* lung"? Two ounces of tar-water were recommended to be taken twice a day, and the spine was rubbed every night with a stimulating liniment. In less than a fortnight the cough had entirely disappeared, and with it the phthisis!

Case III. is a corpulent woman, thirty-six years of age, who was suddenly (*sic!*) attacked with the formidable symptoms of consumption. The cough was at first dry, but in the course of ten days the expectoration of yellow, purulent-looking matter was extremely copious. The quantity exceeded a pint in the twelve hours. Night sweats excessive; no pain in the chest, or in any part of the body. "The respiration was heard throughout the lungs, but feebly at the upper portion of each, and in this region a *somewhat* dull sound was emitted on percussion." The chest was remarkably well formed. The diagnosis in this case is but little better founded than in that preceding. "A dull sound" looks formidable, but we are told that it was only *somewhat* dull,—a remark which always impresses us as meaning *somewhat* like nothing,—and dull on the corresponding superior regions of the chest, in which case the dulness would have escaped observation, had it been very slight, and, in any case, would have been attended with phenomena not mentioned by the author. Our observations upon Case II. are equally valid in Case III. No phthisis is made out. The nature of the case is quite obvious; a general bronchitis, with profuse secretion, taking place in a corpulent woman of "phlegmatic temperament," enfeebled by a recent confinement. The treatment consisted in the administration of tar-water, iodine, and bacon, under which combination the health of this corpulent baker's wife "was thoroughly re-established in less than two months!"

Case IV. is a married lady, whose history is drawn up with the author's usual carelessness, but which we have not space to insert. The physical signs were as follows:—"The respiration was slightly cavernous under the right clavicle, and pectoriloquy was evident in this region. The respiration was feeble over two-thirds of the right lung. It was heard distinctly over the whole of the left, but was a little louder than

natural." We have here, undoubtedly, the skeleton of a diagnosis, but with no rhonchi observable, no falling in of the thoracic wall, no alteration of vocal vibration, no increased conduction of heart sounds; above all, no dulness on percussion! The author's actual ignorance of the entire subject of physical diagnosis is, to our minds, more clearly exhibited in this than in any other of the cases. Had two such signs as pectoriloquy and slight cavernous breathing really existed, some other signs must have been present, and, were the author acquainted with their significance, must have been noted. Considering the absence of these signs, and that the pectoriloquy was discovered in a thin woman, under the *right* clavicle, we think the observation utterly valueless. She was treated for about three months with tar-water, iodine, and cod-liver oil, when she considered herself sufficiently well to lay aside all medicine; and the author states that the pectoriloquy was *still* slightly evident in the infra-scapular region, where it was not previously stated to have existed! So much for the fourth case of phthisis.

The fifth case is a young lady, twenty-one years of age, who had suffered from imperfect and irregular menstruation, and enlarged cervical glands, for some years. She was advised by a medical friend to marry, as being the likeliest means to cure. "Though obviously diseased, this was a matter of no difficult accomplishment. An only child and a large fortune will command suitors. Previous, however, to the consummation (!) of the marriage she was supposed to have taken cold, and suffered for some time from an irritating cough, which for several weeks was regarded as nervous. Menstruation had ceased previous to the occurrence of this symptom"! The physical signs upon which Dr. Holland founded his diagnosis, were:—"The respiratory murmur was scarcely in the slightest degree detected in the upper third of the left lung, and it was almost equally faint in the corresponding part of the right, but not over the same extent of surface; bronchophony was distinct in both lungs, but more strikingly in the left; in other portions of the pulmonary tissue the respiratory murmur was audible, but in many points did not present its ordinary vesicular character." The absence of the signs which usually accompany those given by the author throws, in this case, a suspicion upon the accuracy of the observer, which nothing connected with its general history tends to remove. If bronchophony existed, surely dulness and bronchial respiration must have existed; but neither these nor rhonchi are noted. Tar-water, cod-liver oil, assiduous frictions, iodine, bacon, formed the treatment. Five months from the commencement



of the treatment she had no cough nor difficulty of breathing; and now we have the following, as evidence of the state of the lung. The respiratory murmur was heard throughout the left lung, but only feebly, immediately under the left clavicle, but over a greatly diminished extent of surface; and in this situation only was there any dulness on percussion. An all-important sign, dulness on percussion, at the conclusion of a cured case is, for the first time, noted, and the change or improvement in the only important one mentioned at its commencement, passed over without notice. Yet this man talks of having been a pupil of that distinguished pathologist, Laennec!

In Case vi. we have another young lady, eighteen years of age. Any history that can be made to bear upon phthisis is absolutely wanting, excepting that there was consumption in her family. The respiration, we are told, was heard in both lungs, but imperfectly under the left clavicle, and was somewhat feeble throughout the left lung. There was no dulness on percussion in any part of the lungs. The chest, anteriorly, was exceedingly flat, and the mammæ were very little developed. Her impression was that the chest had been more prominent than at present. All this appeared to our author to exhibit clearly the necessity for the use of the dumb bells, and the case shows the truth of our previous observations, that he must be very injudicious in advising them; for, in forgetfulness of his own theories, he observes, that the first and all-important object in such cases is to give *more space to the action of the lungs* (the italics are the author's), or, in other words, to increase the capacity of the chest. Cod-liver oil and frictions were also used. Two months after first seeing this patient the author had the pleasure to observe her obvious improvement in the form of the chest. "There was by no means the same degree of flatness anteriorly as when she first came under my care. She became, in all respects, perfectly well." (p. 40.) Dr. Holland omits to state how the respiration was going on, but, in truth, our readers must not overlook the important fact, that our author uses these as mere counters to make a pleasant jingle, but meaning nothing. We should not be surprised if he keeps a stock of ready-made diagnostics, with a due admixture of feeble respirations and formidable pectoriloquies, which he adjusts to his imaginary young ladies of the interesting age of 18. The Doctor has some reason on his side. Even the public are astute enough to know that the diagnosis of thoracic diseases mainly rests on a rigid physical examination, and of phthisis more than of any other. As he is ignorant of the nature and import of the signs revealed by this method of exami-

nation, and as he has undertaken the special vocation of enlightening the physiologists and physicians of London upon diseases which necessarily involve the consideration of these signs, he has thought it discreet to bring them in, once at least, in every case. Two questions only occur to us to put to Dr. Holland. In almost every case the diagnosis commences with the observation, that the respiration was heard throughout the lung or lungs. Does he imagine that the respiration being heard throughout the lungs is a very extraordinary phenomenon? Does he believe *absence* of respiration to be a sign of phthisis?

Case VII. is a young lady aged 17, whose flesh was soft and flabby, and had "a somewhat diaphanous aspect!" What a charming creature! How could Dr. Holland submit her to the savage flesh-brush for a quarter of an hour night and morning,—tar-water, iodine, wet sheets, salt and water, and spinal liniments? The physical signs offer a fair warranty for the diagnosis, but the author falls into the vulgar error, that the pulmonary disease was, in all probability, to be ascribed to the cessation of menstruation.

The diagnosis of Case VIII. is only a shade less satisfactory than the first noticed. Case IX. is quite a hit of the author's; everything is *secundum artem*. Signs in due order of importance; cod-liver oil, and so-forth; treatment very satisfactory; but the author cannot escape from his bugbear, for he states, at the end of the case, after informing us of the patient's recovery, that the "respiratory murmur *was* detected in the right lung:" there remained also dulness in the right infra-clavicular region.

Case X. is admitted by the author to be something else than phthisis; "a deficiency of nervous power" is the only tangible diagnosis offered. He appears to have been, malgré the omnipotent nervous system doctrine, at some difficulty to "define the nature of the disease," a circumstance which does not affect us with any great surprise, seeing that the boy was obviously in moderately good health, with the exception of his having lost flesh. Any ancient crone of the Doctor's acquaintance will be able to inform him that this is no very uncommon appearance in growing boys of fourteen years of age. Altogether it was thought a very good case for the flesh-brush, the mode of action of which is thus summed up by the very ingenious Doctor. "Its grateful influence is felt by every fibre of the body. Every molecule (!) of organic matter is placed under new circumstances by its action; the blood is facilitated in its motion, is improved in its properties, and, as a necessary consequence,



is more equally distributed; and hence a more vitalized stream is transmitted to every part of the animal economy."

The eleventh, and, we are happy to say, the *last* case, exhibits in the fullest perfection the utter ignorance of Dr. Holland upon the subject he has undertaken to elucidate. Those of our readers who imagine that we must have given an exaggerated picture of that ignorance will see reason no longer to doubt our fairness. The truthfulness of our estimate we will gladly base upon the facts we are about to mention.

The subject of the case is a young woman, aged 22, who, eighteen months previously, after the sudden suppression of the menses, took cold, and was seized with severe pain in the chest and great difficulty of breathing. The symptoms became aggravated, and she was at last found to suffer from acute inflammation of the left lung. She was bled and blistered. The acute symptoms were subdued, but, even when she was able to leave the house, *there was scarcely the slightest respiratory murmur to be detected in the left lung*, except feebly at the upper portion of it. When her health appeared to be re-established, there was still the absence of the respiratory murmur. The left side of the chest was exceedingly dull on percussion. She was afterwards free from all pain, and there was no cough nor difficulty of breathing, except on more than ordinary bodily exertion. The following winter she again took cold, and was attacked with cough, copious expectoration, profuse perspirations, and hectic fever. The abdomen was unnaturally *large* and tympanitic, and so sensitive to the touch that she could not bear the slightest pressure; urine scanty; mouth apthous. "There was no respiratory murmur to be detected at the lower two-thirds of the left lung. In the upper third there were mucous and sonorous râles." Is there a tyro of the first form in a Dublin School of Medicine who does not see the nature of this case? The author prefaces it by saying it is "interesting in reference to the treatment of *consumption*;" there can be no mistake, therefore, as to his opinion. No one but himself could have failed to comprehend that he was really treating a case of acute pleuritis with effusion and subsequently depressed liver! On examining the chest when the patient was *cured*, "there was still the absence of the respiratory murmur throughout almost the entire of the left lung, as well as dulness on percussion." This sagacious observer only remembers one case strictly analogous to the foregoing. It was a young man who was attacked with consumptive symptoms, and whose "*right lung was altogether impervious to the inspired air*."

We must now conclude our task. We set out with the asser-

tion that we should be able to prove that Dr. Holland is ignorant of disease; it was necessary, to this end, to analyze the cases with which he has furnished us: on other grounds it was still more necessary. Dr. Holland has excluded himself from medical criticism from henceforth, not so much from his having undertaken the practice of a system at variance with medical philosophy, but because, had he no system to defend or doctrines to oppose, he does not possess the slightest claim to notice as an ordinary observer of received medical facts. He is, therefore, no longer a subject for criticism, not because he has made Dr. Quin his friend, but because he has made every man of the lowest medical attainments his enemy; in short, not because he chooses to give medicines in smaller doses than his quondam brethren, but because he is not capable of recognising the diseases for which he is administering them. Little shall we be expected to enter into the question as to how far Dr. Holland's cases bear out his therapeutics. So inconsequential a reasoner is not likely to render us aid in this particular, and, of course, as the diagnosis is unsound, the whole conclusion is vitiated. We have frequently mentioned cod-liver oil among the drugs used by the author. As far as he is concerned, this invaluable remedy remains *in statu quo*. No conclusions can be fairly drawn from such a therapeutical far-rago as that presented by this small-dose writer. We have too recently brought the merits of this valuable therapeutical agent before the readers of this Journal, to render it necessary for us to rescue it from the praises of Dr. Holland. We sincerely hope that the oil will not be compelled to assume the motto, "save me from my friends," an event which appears not very unlikely.

Still less shall we be expected to undertake the discussion of the system of Hahnemann. In truth, Dr. Holland has only served up this system in scanty measure at present. It must be remembered that we have been engaged with this gentleman in his transition period. He is in the position, now, more of a jackall than of the full-blown homœopathic lion. The readers of these books will be dropped by a gentle descent into the hands of the advanced masters. This is the exact peril, indeed, we saw they might be in danger of falling into, or we should not have filled so many goodly pages with these details. Very early after homœopathy raised its head among members of the profession, our lamented coadjutor, the late Dr. John Oliver Curran, pretty satisfactorily settled its claims to consideration, in an article in this Journal<sup>a</sup>. When we think that

<sup>a</sup> Vol. i. N. S. p. 173.



the interests of the profession require that the pages of a scientific periodical should be occupied with such a discussion, we shall not be wanting in alacrity to expose again this masterpiece of medical folly and humbug. But we shall choose for our basis some book written by a man bold in his delinquency, ingenuous in his attacks, an avowed enemy to medical science, who fully and fairly states his principles, and fully and fairly brings forward his facts.

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*Recherches sur les Maladies des Os, désignées sous le Nom d'Ostéomalacie, et Lettres sur la cause principale des morts subites survenues pendant l'Inhalation du Chloroforme.* Par. G. P. STANSKI, D. M. P., &c. &c. Paris: Germer Bailliere. 1851. 8vo., pp. 128. Avec Planches coloriées.

*Researches on the Disease of the Bones designated Osteomalacia, and on the chief Cause of sudden Death during the Inhalation of Chloroform.*

THIS brochure is not one which recommends itself by anything very original, either in the matter or in the manner of treating the subject. It is, however, a tolerably good *resumé* of what is generally known upon mollities ossium, and some of our readers may thank us for directing their attention to it.

The term osteomalacia Dr. Stanski does not confine to softening of the bones arising from one effect, but under it he includes the diseases produced by many and widely different causes, for example, rachitis, which he regards as differing merely in degree; scorbutus, syphilis, scrofula, and old age.

It is a disease which prevails in most countries, and at all ages of life. Of 32 cases collected from authors, 1 occurred in a new-born infant; 8 in persons from 16 to 30 years; 6 from 30 to 40; 3 from 40 to 50; 4 from 50 to 60; 2 above 60; and 8 of whom the ages are not given, but which M. Stanski supposes from their history to have been between 20 and 40 years of age. Of these 32 cases, 23 were females and 8 males.

Our author dissents from the explanation given by Herrissant, Morgagni, Moraud, Caspari, and others; and attributes the essential nature of the disease to depravation (in various ways) of the blood.

"The parts," he observes, "which contribute to the nutrition of our organs, are the blood, the capillary vessels, and probably the nerves. Of these, the blood being the most important, any alteration of this fluid must exercise a baneful in-

fluence upon our organism; and upon the quality of this fluid, essentially nutritive, will depend the integrity of the nutrition of the tissues of the body.

“The state of the blood, on the other hand, is influenced by various circumstances, some of which surround us, as air, aliments, climate, &c.; others are internal, such as the healthy or morbid state of the organs which concur in the elaboration of this fluid. Now the blood containing matters which ought to be assimilated to the tissues of our organs, it may happen that the peculiarities and the composition of this fluid may be altered to such a degree, that, instead of being able to assimilate their respective portions, their tissues may appropriate, or rather receive, from the vitiated blood, substances foreign to their organization, and in this way give rise to the profound alterations and to the degenerations which we observe every day.”

Under the head of pathological anatomy the author has carefully described the changes of form and intimate structure which the bones undergo. The symptoms are classed under two heads, the *primitive*, dependent upon the intimate nature of the affection, and the *consecutive*, which result from the disturbance of the functions of other organs. Pains in the extremities, in the pelvis, along the vertebral column, &c., deviations from the natural form, curvatures of every variety and degree, are among the former; and among the latter, disturbances of the digestive system, or of other organs which may be concurrently affected by the same diseases, as cancer, syphilis, &c., or which result from compression.

The deformity may be comparatively slight, or it may be grotesque or monstrous, as Dr. Stanski has shown in the plates appended to the volume.

Lobstein and Guerin have propounded diagnostic differences between rachitism and osteomalacia; but Dr. Stanski agrees with P. Franck and Eckmann that the difference is only in degree, and he has shown that the points of distinction usually laid down are not correct. He has, however, detailed the symptoms which distinguish the affection, when it is a sequence of rickets, from those which are developed when it is a consequence of cancer, scorbutus, syphilis, &c.

The following prognosis in this most melancholy complaint will form an appropriate introduction to the notice of the treatment.

“Osteomalacia is a very serious disease, not so much in itself as by the disturbance which it occasions in organs indispensable to life. All the means as yet employed having been



ineffectual, it may be considered as incurable, and almost always fatal, especially when general and at an advanced stage. However, the prognosis is more favourable when the disease is observed at an early period, if the patient be not too old, too feeble, or too much exhausted by anterior diseases, and, in the last place, when the cause of the disease is scorbutic or syphilitic. In all these cases, the disease being essentially chronic, those who are thereby affected may have their existence prolonged for a considerable time."

Under the head of treatment, after again referring to the hopelessness of success in certain cases, in others Dr. Stanski observes:

"The person must be removed from all influences which may favour the development of the diseases; he should be transferred to a healthy, warm climate, or at least to the country; take exercise in the open air; use a succulent diet; abstain from all habits which exhaust and deteriorate the health; lastly, if a female, she is to be forbidden to marry, since delivery has often been the occasional exciting cause of the disease."

In the worst cases we must content ourselves with palliative measures, choosing such positions and postures as will best counteract the flexuosities of the bones, and which will not cause others equally inconvenient. Lastly, if the ramollissement be local, Dr. Stanski advises the removal of the diseased part.

To this essay are appended two letters on the cause of the sudden deaths which have occurred during the use of chloroform; and their importance is pretty much limited to the claim they make, on behalf of the author, to have been the first who attributed these unfortunate results to the chloroform having been inhaled in an upright posture.

Before concluding these few remarks on Dr. Stanski's work, which we have written chiefly with the view of calling the attention of our readers to it as a book of reference, we must express our regret at the very slight notice of the condition of the urinary secretion amongst the symptoms of the disease, as described by him. Its great importance is well illustrated in Dr. Macintyre's case, in our review of the last volume of the *Medico-Chirurgical Transactions* in our present Number.

*Medico-Chirurgical Transactions.* Published by the Royal Medical and Chirurgical Society of London. Volume the Thirty-third. London: Longmans. 1850. 8vo. pp. 360.

*General Index to the first thirty-three Volumes of the Medico-Chirurgical Transactions.* Published by the Royal Medical and Chirurgical Society of London. London: Longmans. 1851. 8vo. pp. lxxx. and 236.

IN our first Number for last year we noticed the various points of interest in the thirty-second volume of the Transactions of this Society, and, in doing so, expressed our regret at the diminished quantity of matter contained in it, and in the volumes which immediately preceded, being apprehensive that this was an indication of the decadence of one of our most ancient British medical societies, one which we were accustomed from our student's days to revere, as having tended so much to the cultivation of medicine and surgery in the present century. With pleasure, then, we greeted the appearance of the volume now on our table, which is not alone of goodly dimensions, but is filled with valuable and original matter. Much of the interest which was formerly attached to this series has, we must confess, disappeared, in consequence of the admirable manner in which the proceedings of the Society are published in our weekly and monthly periodicals; yet we think that an analysis of the contents of each volume, as it appears, cannot fail to prove both useful and acceptable to our readers.

In the present volume twenty-five communications are published, and as all of them contain matter of more or less practical value, we will proceed to analyze, as concisely as possible, the important features which they present. We may premise that the essays are inserted in the volume in the order in which they have been read before the Society.

The volume opens with the account of *A Case in which a foreign Body was impacted in the Right Bronchus*, from the pen of Dr. Gregory Forbes. The symptoms attendant on an accident of this nature are of so formidable a character as to lead the majority of surgeons to the conclusion that the extraction of the body should be attempted as soon as possible, when no special circumstances contra-indicate an operation; yet some are of opinion that operative interference is imprudent, inasmuch as in many cases the foreign body has been ejected by the efforts of nature, and in all, the precise indications for the operation are uncertain, and "the introduction of instruments within the air-passages is a difficult and dangerous proceeding." The au-



thor of the paper inclines to the opinion that early operative interference is usually advisable; and the case he narrates (although probably any operation would not have averted the fatal results) bears out, we think, this view.

A female aged 46, while eating some broth on the 10th of May, 1849, felt what she believed to be a piece of bone, covered with gristle, pass into the windpipe. She was immediately attacked with symptoms of suffocation, and severe spasmodic cough, and became black in the face. On the next day she was seen by Dr. Forbes, when her voice was hoarse, the respirations only from ten to twelve in the minute, accompanied by a wheezing noise and a constant short cough, and she complained of pain at the upper part of the chest, *at the junction of the second rib with the sternum*. On auscultation, the left lung was in a comparatively normal condition, while in the right the natural vesicular respiration was scarcely perceptible, and "a prolonged and peculiar ronchus was heard throughout the lungs, but most distinctly over the point to which the pain was referred." The symptoms continued severe until the fourth day, when they were much mitigated; and a consultation being then held, it was decided that no operation for the removal of the foreign body should be attempted. On the twenty-first day after the accident, the symptoms, which were "disturbed nights, paroxysms of fever, occurring almost daily, and generally in the afternoon, profuse night-sweats, general pain, and paroxysmal cough," became aggravated, and the expectoration increased, amounting to a tea-cupful in the day: still no operation was attempted. For the next three weeks a remission in the severity of the symptoms again occurred, but on the forty-second day the expectoration, which before had been a frothy mucus, became purulent, offensive, and much increased in quantity: the pulse was 136, and the respirations forty-four in the minute. She died on the fifty-sixth day after the accident.

On examination after death, a pleuritic abscess was found on the right side close to the diaphragm, and about the size of the palm of the hand; the lower two-thirds of the right lung were dense and infiltrated with offensive pus, from the description, in a gangrenous state. The cause of this condition, and of the symptoms during life, was rendered manifest on slitting up the right bronchus; a small piece of bone, weighing, when dry, three and a-half grains, being found firmly impacted in the orifice of the third branch given off from the bronchus which passed into the middle lobe. All the other organs in the body were comparatively healthy.

This is a most instructive case, and one from which we

think the conclusion must be drawn that, in similar accidents, surgical interference is demanded as early as possible before the occurrence of grave symptoms; for although a forceps introduced into an opening in the trachea may not reach the foreign substance, we cannot predicate what change of posture of the body may effect in altering its position, as in the celebrated case of Mr. Brunel.

The next paper is by Mr. Campbell de Morgan, on *Section of the Tendo Achillis in some Cases of Fracture of the Bones of the Leg*. This operation, not unfrequent on the Continent, has not attracted much notice in the British islands, certainly not as much as it seems to merit. M. Meynier first performed it in France, in a case of severe fracture of the tibia and fibula, attended with such violent spasms of the muscles of the leg that suppuration had taken place, portions of some of the muscles had been destroyed, the ends of the bones were exposed and protruded, and the inferior portions drawn behind, so as to form an angle with the upper. Before resorting to either of the operations of sawing off the ends of the bones, or amputation of the limb, which were proposed in consultation, M. Meynier thought he would try the effect of division of the tendo Achillis, and the result was immediate and almost complete success. M. Bérard and M. Laugier have also had recourse to this operation; the former to enable him to reduce the fractured bones in compound fracture at the malleoli, and the latter in oblique fracture of the tibia, and both with favourable results, as regarded the immediate effect.

Mr. De Morgan describes two cases in which this operation was attended with complete success; one from the practice of his colleague, Mr. Shaw, at the Middlesex Hospital, and the other from his own, in the same institution. In Mr. Shaw's case, the fracture extended through both the malleoli, and there was great distortion at the ankle-joint, owing to the foot being twisted to the outside. Although it was easy to restore it to its proper position, it was impossible to retain it so, from the violent spasms which immediately ensued. Various apparatus were used, and the limb placed in every position, with the view of overcoming the spasmodic action of the muscles; but all being unavailing, the tendo Achillis was divided, when the difficulties at once ceased, and complete recovery took place in the usual time. In Mr. De Morgan's case there was fracture of the tibia and fibula, that of the tibia being very oblique. Nothing could overcome or obviate the spasms, and on the ninth day the tendo Achillis was divided, from which time re-



covery proceeded in the usual manner. The result of these cases is highly satisfactory, as regards the value of the aid that the surgeon may derive in some cases of fracture of the leg from this operation. We need scarcely add that the operation is performed by the usual subcutaneous section practised in tenotomy<sup>a</sup>.

Dr. Jenner next publishes an interesting essay *On the Identity or Non-identity of the specific Causes of Typhoid, Typhus, and Relapsing Fever*, in which, after a concise account of the grounds from which he draws his conclusions, and an outline of the statistics on which they are grounded, he propounds, as the result of his inquiry, the induction that "the specific causes of typhus and typhoid fevers are absolutely different from each other; and that it is in the highest degree probable that the specific cause of relapsing fever is different from that of either of the two former." The entire question of the causation, the course, the symptoms, the lesion, and the sequelæ of these fevers, has been most ably treated by Dr. Jenner, in a series of papers in the *Monthly Medical Journal*, reprinted also in a separate volume, a perusal of which will well repay our readers. As we purpose to analyze his views more at length in our next Number, we shall not dwell on them at present.

The fourth paper in the volume contains an interesting account of a *Case of complete intestinal Obstruction, in which the descending Colon was successfully opened in the Loin*, by Mr. Field, of Birmingham. It occurred in a corpulent, muscular man, thirty-three years of age, a coach-axle forger by trade. He had always enjoyed good health until about twelve months before the operation, when his bowels became irregular, the stools being scanty and voided with difficulty. From this time the symptoms became daily worse, and about four days before he was seen by Dr. Field the natural action of the bowels entirely ceased. He was at first treated with calomel and opium in full doses, bleeding, warm baths, and enemata of castor oil and turpentine. Not more than a pint of fluid could be injected into the rectum, and the colon tube could only be passed up to the distance of eight inches when it was obstructed. Croton oil was also administered, both by the mouth and in enema, but only "the most trifling portion of hardened fæces" was brought away. This plan of treatment was followed up for twelve days,

<sup>a</sup> At page 205 of our last Number, Professor Smith describes a case in which he divided the tendo Achillis with decidedly favourable results.

when, all medical means being evidently useless, sixteen days having elapsed without any evacuation from the bowels, Amusat's operation was performed. The steps of the operation are thus described by Mr. Field:

“ As the patient lay on his back no indication of the precise nature or situation of the obstruction was observable. The abdomen was equally swollen on both sides, presenting everywhere the same elastic resistance to pressure; the sound on percussion, being generally clear, was duller as it approached the loins. As the patient lay on his belly no bulging was observable in the lumbar region of one side more than in that of the other: percussion elicited a rather duller sound on the left than on the right side. The patient being extended on a bed with his face downwards, a transverse incision was made on the left loin, beginning at the ridge which marks the external margin of the erector spinæ muscle (about two inches from the spine), and carried directly outwards. This incision was five and a half inches long, and was situated a finger's breadth above the crest of the ilium; it passed through the skin and fat nearly one inch in depth, down to the latissimus dorsi muscle. This muscle, and the quadratus lumborum, were now divided to the extent of the incision of the skin, and a layer of fat bounded on the inside by the external margin of the erector spinæ muscle was brought into view. On dissecting this away to the depth of about half an inch, a thin transparent membrane was exposed. From the appearance of this membrane, which it was conceived might be the intestine, it was thought advisable to pass sutures through it, to retain it in its position, and subsequently to affix it to the edges of the wound. However, on penetrating it with the knife, a mass of soft granular fat started through the incision. A very large quantity of this fat was cautiously dissected away, and the finger was then introduced to search for the bowel, but no precise indication of it could be felt; the finger, when passed upwards, rested on the lower part of the left kidney, while downwards it came in contact with the inner margin of the crest of the ilium. The wound being now of considerable depth, it was necessary to proceed with great caution, and clear away the fat little by little, which proceeding, from the looseness of the nature of the fat, was rather difficult, and occupied some time.

“ At length the bowel was brought into view, at the depth of about four inches; it was highly vascular, and having been cleared of fat, sutures were passed through it and held by assistants. An incision half an inch in length was made into the bowel, and an immense quantity of light-coloured fluid fæces immediately escaped. The patient had been vomiting similar fæcal matter during nearly the whole of the operation, but this vomiting now entirely ceased, and he was relieved of all his symptoms. The opening in the bowel was fastened by sutures to the skin; a large bread poultice was placed over the wound, and retained by a bandage passed round the



body, the patient being enjoined to lie on the left side to facilitate the escape of the fæces. Scarcely two ounces of blood were lost during the operation."

From the effects of the operation he recovered completely, being able to sit up on the nineteenth day, and an artificial anus was established in the lumbar region. He lived for a year and nine months afterwards, during which time he had acquired his full weight, and was able to do as much work as at any time in his life, suffering only occasionally from temporary constipation. He, however, became intemperate and died dropsical, the operation of tapping having been required some time before his death. On *post mortem* examination it was found that the cause of the obstruction was situated in the sigmoid flexure of the colon, being "about four inches in length and three-fourths of an inch in diameter. When cut into, the whole of this portion was found to be filled with a plug of apparently firmly coagulated lymph, which entirely obliterated the canal."

We have given a rather extended analysis of this case, which reflects great credit on Mr. Field, both for his skill in diagnosis, and the manner in which the operation was performed. We have now numerous cases on record in which the operation of forming an artificial anus has been successfully resorted to in obstruction of the intestinal canal. The great difficulty in coming to a decision in any given case depends on the doubt as to where the obstruction exists. Nor can any decisive rules be laid down to direct our diagnosis, if we except the information to be derived from the introduction of O'Beirne's long colon tube, when the disease, as in Mr. Field's case, is within reach of the instrument; when it is thus detected, not a moment, after the failure of the ordinary medical resources, should be lost in having recourse to Amussat's operation, the favourable result of which is now so well established.

The next case, also one of *Complete Intestinal Obstruction*, is by Mr. Josiah Clarkson, of Birmingham. The impediment in it arose from disease of the sigmoid flexure of the colon and the rectum, and the descending colon was opened in the loin successfully. The patient was a robust young girl, aged 21. After the usual medical treatment had failed, twelve days having elapsed without any evacuation from the bowels, Amussat's operation was performed in the usual manner. Mr. Clarkson gives the following practical directions for ascertaining the spot where the bowel is to be found:

“ Two fingers’ breadth above the crest of the ilium, and midway between the anterior and posterior superior spinous processes of the same bone, is the spot beneath which the intestine will generally be found. This mode of finding the exact situation was first pointed out to me by Mr. Hodgson, at the time of the operation; and since then I have frequently proved its accuracy on the dead subject.”

The patient recovered, with an artificial anus, the only annoyance being the tendency of the orifice to contract and block up the passage, as usually happens in these cases. This, in spite of all the means that could be used, eventually caused her death, nearly fourteen months after the operation. On *post mortem* examination, the obstruction, which existed about six inches from the lower termination of the rectum, and on a level with the fundus of the uterus, was found to be caused by a dense cartilaginous substance which surrounded the intestine in this spot, and completely obliterated its canal.

Dr. Dundas Thompson, Professor of Chemistry in the University of Glasgow, gives an account of his *Chemical Researches on the Nature and Causes of Cholera*. As the essay is one filled with experimental facts, it does not admit of analysis; and we shall, therefore, give the conclusions at which he arrives in his own words:

“ 1. That the incipient stage of cholera does not differ materially from the common forms of diarrhoea, inasmuch as its treatment is successfully managed by similar means; and this result may lead to the inquiry,—Does not the removal of the symptoms of the disease by narcotics, and, therefore, the retention of the fluids in the system, afford an argument against the idea of a morbid poison being the cause of cholera?

“ 2. That, in the second stage of cholera, a lymphatic fluid is diffused from the blood into the intestinal canal, corresponding exactly in chemical composition with that secreted or diffused through the serous membranes in hydrocele and hydrocephalus, and other forms of dropsy. Compared with healthy blood, it appears that the salt which has diffused most largely into the intestines is common salt, while the albumen of the blood possesses this power of transference generally in a very limited degree. The facts seem to show, that in this stage, instead of, as in the natural state, the diffusive power of the mucous membrane being exerted from the intestines towards the blood, the reverse action occurs; thus pointing to a parallelism with purely physical phenomena. Conjoined with other characters, they supply an argument for the inquiry,—May not cholera be an *epidemic intestinal catarrh*, influenza being an *epidemic respiratory catarrh*?

“ 3. In the third stage the lymphatic fluid ceases to be poured



out from the blood. The bile is excreted, and the normal diffusion from the intestines to the blood resumes its action.

“4. There is no evidence of the existence of any organic body in the atmosphere during the prevalence of cholera.”

The following paper contains the account of an interesting case of *Stricture of the Œsophagus*, which proved fatal two years and three months after soap-lees had been accidentally swallowed. The symptoms were almost precisely analogous to those which were presented in the many similar cases that are on record: namely, apparently complete recovery from the immediate effects of the accident; symptoms of difficulty in swallowing, occurring many months—in this case ten—afterwards; the patient being unable to get any solid food into the stomach, it being returned by the mouth, after having been retained in the œsophagus for a space; rapid improvement at first, under the use of bougies, but eventually complete closure of the passage; and death, with the most frightful sufferings from hunger and thirst, the torments, as appositely remarked by Dr. Basham, resembling those of the fabled Lydian king:

“Nec bibit inter aquas, nec poma patentia carpit  
Tantalus infelix ! quem sua fata premunt.”

The deduction to be drawn from all the recorded cases of œsophageal stricture produced by local irritants is, we fully agree with the author, that as soon as the immediate inflammatory symptoms have been subdued, the bougie should be employed daily, and its use continued for many months, even in the absence of any indications for its necessity. Indeed its introduction, at short intervals, should not be omitted during the remainder of the individual's life.

The next essay is by Dr. George Johnson, in continuation of those he has previously published on the *Proximate Cause of albuminous Urine and Dropsy, and on the Pathology of the Renal Blood-vessels in Bright's Disease*. To his former observations we owe much of the light that has been of late years thrown upon the pathology of this most important affection; and he states, in the commencement of his present communication, that subsequent observation has confirmed the opinion he originally expressed, that an altered condition of the secreting cells of the kidney is the first morbid change which can be detected.

“The various changes in the secreting cells, just now enumerated, produce one common result; viz., an imperfect elimi-

nation of the renal secretion. The acute desquamative process rapidly fills the tubes with epithelial cells. The chronic desquamation destroys the life of the cells, arrests their reproduction, and leaves the tubes denuded. The fatty engorgement of the cells tends to obstruct the tubes, and so to impede secretion; and probably each visible deviation from the normal appearance of the epithelial cells is attended by a corresponding imperfection in the performance of their function."

Dr. Johnson compares the effects produced on the renal circulation, from the imperfect elimination of the urinary constituents,—caused by the blocking-up of the tubes in consequence of the altered action of the secreting cells, that has been termed *desquamation*,—to the change effected in the pulmonary circulation by the retention of carbonic acid in the blood; and thus analogically conjectures that the circulation is first retarded in the inter-tubular capillary vessels, and eventually, that the Malpighian capillaries, and the arteries which supply them, become gorged with blood. The reasonableness of this hypothesis we fully admit, and accord with the author as to its being fully borne out by the symptoms which are present during an attack of acute desquamative nephritis. The morbid alterations which Dr. Johnson has found in the circulatory apparatus of the kidney in chronic renal disease are, thickening of the walls of the arteries, most marked in the smallest vessels, and hypertrophy of the coats of the Malpighian capillaries; the canal being apparently normal, or perhaps slightly narrowed, while the inter-tubular capillaries and veins are less numerous than in the healthy kidney, but their coats present no appearance of thickening, or of any other morbid change.

"The pathological explanation of these changes in the renal blood-vessels appears to be this. There is an imperfect elimination of the urinary constituents, in consequence of changes in the secreting cells, produced by an effort which they have made to excrete abnormal products. Deficient excretion at once leads to impeded circulation, the obstruction occurring at the very point where the excretion should be effected, viz., in the inter-tubular capillaries. The impediment reacts backwards upon the Malpighian capillaries, which in a sudden acute attack become ruptured, and allow the blood to escape into the urinary tubes; but when the disease has been of longer duration, they become thickened, and permit only the serum of the blood to escape. The thickening of the Malpighian capillaries is probably preservative, and is intended to enable them to bear the increased pressure to which they are subjected during the continuance of the disease.

"The thickening of the arteries, which proceeds simultaneously with that of the Malpighian capillaries, affords support to the opi-



nion entertained by some physiologists, that the smaller arteries exert a propulsive influence upon the blood. The remarkable hypertrophy of the muscular coats of these vessels seems to have for its object to assist in driving the blood onwards through the inter-tubular vessels in which the impediment exists. Finally, the gland-cells being destroyed, and the process of secretion arrested, the circulation ceases, the tubular tissue wastes, and oil-globules collect in the canals of the blood-vessels. This appears to be the order in which the various changes occur, and the probable relation which they bear to each other. So far as my observation has extended, the thickening of the vessels appears to be associated with all the forms of deposit in the tubes, and is in proportion to the degree in which the tubes and secreting cells are destroyed, as well as to the duration of the renal disease."

Dr. Johnson concludes his paper with some observations on renal dropsy. The result of his investigations confirms the explanation of Dr. Bright, that it is caused by capillary obstruction, and a consequent arrest of poisoned blood in the capillary vessels.

The next essay, that by Dr. Quain on *Fatty Diseases of the Heart*, we have reviewed at length in our last Number.

In the following paper, Dr. Macpherson gives an account of the successful extraction, by the lateral operation, of a bullet from the bladder, in which it had been lodged by a gunshot wound at the battle of Chillianwallah, and a short notice of fifteen similar operations which had been previously recorded is appended.

Dr. Maclachlan, physician to the Royal Hospital at Chelsea, next narrates a *Case of Scrofulous Abscess of the Anterior Mediastinum, communicating with both Sides of the Chest, the Pericardium and Trachea, forming a Tumour above the Clavicle, and simulating Aneurism of the Innominata Artery or Arch of the Aorta*. Notwithstanding this elaborate title, in which the author's views of the nature of the case are so wordily detailed, the paper does not require any more notice from us than a statement of our opinion, that the facts detailed do not bear out this view. The conclusion we have come to from the narrative given, is, that the case was one of empyema of the right pleural sac, opening into the mediastinum and pericardium, and pointing above the sternal end of the right clavicle; therefore, too ordinary a case for admission into the Transactions of the Medico-Chirurgical Society of London.

The twelfth article consists in the description of a case of *Mollities and Fragilitas Ossium*, in which the urine was strongly charged with animal matter. During life the symptoms were:—great emaciation; diminished temperature of the surface of the body; appetite keen, often voracious; bowels sluggish, but easily excited to diarrhœa; and pains all over the trunk, eventually becoming fixed in the left lumbar and iliac regions, and obliging the patient to observe a semi-bent posture, on account of the agony caused by every attempt at movement of the body on the thighs. The case was for a length of time under the observation of Dr. Macintyre, who furnished the report of it to the Society. The urine, which seems to have been at first natural, became gradually loaded with animal matter, its specific gravity varying usually from 1035 to 1040; and death was eventually caused by this continued exhausting excretion. Of the various remedies tried with the view of checking it, alum alone seemed to have even a temporary effect. Towards the close of life, when the sufferings from the lumbar pains were extreme, the liberal use of Dover's powder with the guaiacum mixture, and the external application of the alcoholic tincture of aconite, mitigated them somewhat. At the *post mortem* examination, the thoracic parietes presented the following appearances:

“On dividing the cartilages at the usual place, it was found that the adjoining extremities of the osseous ribs crumbled under the heel of the scalpel; and on prosecuting the dissection it was discovered that all the ribs, throughout their whole length, were soft and brittle, so that they could be easily cut by the knife, and readily broken at any point, by the exertion of a very moderate force. They had evidently lost much in size and weight, as well as in consistence and tenacity; their outer encasement, or laminated portion, was very thin, loose, and fragile, yielding and crackling when pressed between the fingers and thumb; their interior was charged with a soft, gelatiniform substance, of a blood-red colour and unctuous feel. The sternum was in a similar state of softening and fragility, first bending, and then snapping across when raised and turned back; but its under surface presented a deeper and more extensive redness, and its cancellated structure was more loaded with the coloured matter.”

There was no important deviation from the normal condition in any of the thoracic or abdominal viscera. The spine was then examined:

“The three upper divisions of the column were found to have undergone, more or less, the same morbid change of structure which



was discovered in the ribs and sternum. All presented the same characters of softness and brittleness, but the dorsal and lumbar had evidently suffered most from morbid degeneration and interstitial absorption, their bodies scarcely equalling those of the cervical in thickness.

“With the lumbar vertebræ, disappeared the characters of active disease and disorganization. The sacrum and flat bones of the pelvis were unyielding and impenetrable by the knife, but in colour they exhibited, it was thought, an unnaturally grey tint. Beyond this the examination was not prosecuted, as the cylindrical bones of the extremities were found to resist all efforts to bend or break them by manual force.”

The microscopical appearances of the bones in this highly interesting case have been published by Mr. Dalrymple at much length in the second volume of the present series of our Journal, page 85, and to his paper we refer our readers for an account of them. And Dr. Bence Jones has published an elaborate analysis of the urine, as examined by him during the patient's life-time, in the Philosophical Transactions of the Royal Society of London for 1848.

The most important practical deduction from the account of this case, so admirably given by Dr. Macintyre, is, that the great obscurity which involves the diagnosis of this rare disease may be much diminished by an attention to the condition of the urinary excretion.

In the next article, the account of a *Case of very large Hæmatocele of the Spermatic Cord, proving fatal after ten Years*, is given by Mr. W. Bowman, and Mr. Curling appends to it the history of a *Case of very large Hæmatocele of the Tunica Vaginalis*. The subject of Mr. Bowman's case was a Leicestershire farmer, aged 60. The disease originated ten years before his death, and was caused by his having been accidentally thrown from his horse against some railings. This gave rise to a swelling in the right inguinal canal as large as a hen's egg, oval, firm, but elastic, and receiving no impulse from coughing.

“Up to three years ago it had remained in the same situation, having merely undergone some slow enlargement, when, at that date, during exertion in walking, it was felt by the patient to become suddenly larger and heavier; and, on examination, this increase was found to depend on a vast effusion of blood, not merely about the canal, but into the tissues of the scrotum, so that the whole of these parts were enormously distended, and it was impossible to ascertain what the condition of the testicle or tunica vaginalis might be, though they had previously been healthy. When

time had been allowed for the disappearance of the ecchymosis, and the integument had regained its natural colour, the tumour manifested no disposition to recede, rather indeed to augment in size, and the surface of the scrotum began to exhibit large distended veins meandering across it. There was fluctuation, and a trocar was cautiously introduced by Mr. Paget, of Leicester, who had been called in to the case soon after the period when this enlargement had occurred. 'On introducing the trocar,' says Mr. Paget, in a note, dated Dec. 3, 1848, 'nothing followed but a free gush of blood mixed, arterial, and venous, and I thought I had committed the mistake of plunging a trocar into a vascular tumour, from which might sprout an abundant and bleeding fungus. To my great delight, however, it kindly healed; and though this was nearly two years ago, ulceration and fungus have not yet appeared, nor does the man's complexion bear the tinge of malignant disease. The tumour, meanwhile, has attained a vast size (I should say it is as large as the abdomen), and has never lost its deceitful fluctuation, so that another practitioner has been induced to puncture it again yesterday week, and with the same result, only that now, when called again to see it, I find a *tympanitic* sound on percussion over the upper third, or two-fifths of it, and also, on shaking the tumour, a sound like that which would be produced by agitating a thick fluid in a vessel containing air. This is heard as well as felt, and the patient assures me was not present till after the last puncturing.'"

Mr. Bowman soon after this went down to the country to see the patient, and as it was evident, from the tympanitic state of the tumour, its contents were undergoing decomposition, he first pierced it with a trocar, which gave exit to much fetid gas and some dark brown putrid blood. He then enlarged the opening, and removed "nearly two large wash-hand basins full" of the same kind of blood, mixed with large masses of old coagulum. The patient was at this time labouring under low irritative fever, and he sank on the fifth day after the operation. No *post mortem* examination was made.

Mr. Curling's case, which also proved fatal, occurred in a gentleman aged 79. The scrotal swelling was larger than the patient's head, and extended half way down the thighs. The gentleman laboured under retention of urine when Mr. Curling saw him, and as it was impossible to pass a catheter, the penis was so completely buried in the tumour, he was compelled, though unwillingly, to lay it open. The incision gave exit to upwards of three pints of dark grumous fluid, on the surface of which numerous particles of cholesterine floated. The patient died in a week afterwards, and, on examination after death, the sac was found to consist of a dilated tunica vaginalis, with masses of coagula adherent to its internal surface.



The following is the practical deduction which Mr. Bowman draws from these two cases:

“ That hæmatocele has little tendency to undergo spontaneous cure, and that sooner or later it will probably enlarge and prove fatal. There should, therefore, be not unnecessary delay in carrying out the ordinary practice of laying open the cavity by a free incision, when the persistence of the swelling and other circumstances indicate the presence of extravasated blood.”

Dr. Beaumont, Professor of Surgery in the University of Toronto, Canada, next relates a *Case of Disarticulation of the left Condyle of the lower Jaw, with Excision of nearly the left Half of the Bone on account of a very large cartilaginous Tumour growing from, and occupying the Site of all this Part of the Bone, save the Condyle and Neck.*

The following is a short communication by Mr. Page, Surgeon to the Infirmary at Carlisle, on *Excision of the Os Calcis in incurable Disease of that Bone, as a Substitute for Amputation of the Foot.* The case which he brings forward in evidence of the advantage of this operation is that of a boy, aged 16, in whom there was scrofulous disease of the ankle-joint, apparently altogether confined to the os calcis. The boy's health having been improved by rest, nourishing diet, and the administration of cod-liver oil, the operation was performed as follows:

“ Insensibility having been induced by means of chloroform, an incision, down to the bone in its whole extent, was made from the lower margin of the ulcer, that is, about half an inch below the inner ankle, directly below the sole of the foot, to just below the fibula. This incision would have enabled me to remove the foot at the ankle-joint, if the disease of the tarsal bone had proved more general than I anticipated. A careful examination at this period of the operation having determined me to proceed in my original design, the posterior flap was carefully reflected from the surface of the bone, the insertion of the tendo-achillis separated, and the joint between the astragalus and calcanium reached.

“ By the introduction of a small, narrow-bladed scalpel, I succeeded in dividing the ligamentous structures on either side, and also the inter-osseous ligament. This last was the only part of the operation attended with anything like difficulty, forcible depression of the os calcis being necessary to admit of the division of the more distant parts of the inter-osseous ligament, while at the same time great care was required to prevent my injuring the astragalus. I next made two incisions, one on either side of the foot, commencing at the junction of the os calcis with the os cuboides, and ending at the extremities of the first, or transverse incision; dissected this

flap from the under surface of the bone, readily separated the connexion of the calcanium with the cuboid bone, and after a few touches of the scalpel, the former, with scarcely a particle of soft parts attached, was removed. The astragalus and cuboid bones appeared quite healthy. The two plantar arteries, which had been divided near to their origin, and two or three small vessels in the anterior flap, were tied, the parts placed in apposition, and retained by means of strips of lint dipped in cold water, oil-silk and bandage, and the limb was laid on a splint placed on its outer side."

The boy suffered from an attack of erysipelas in the affected limb after the operation, but from this he recovered completely, and "at the end of the tenth week the wound was healed, the foot was firm, and in shape not materially different from the other." In sixteen months after the operation the foot was sound, and he had very good use of it. Mr. Page appends to his essay a notice of three other cases, in which excision of the os calcis had been resorted to in the Newcastle Infirmary for extensive caries of that bone, and which had been attended with success to a greater or less extent.

The next paper is the report of a *Case of Stricture of the Rectum, wherein an artificial Anus was successfully established in the left Lumbar Region*, by Dr. Croker, of Rio de Janeiro.

The following essay is by Dr. Lee, *On the Use of the Speculum in the Diagnosis and Treatment of Uterine Diseases*. After some introductory observations on the history of the instrument, he states that his object in this communication is to define accurately its *legitimate* use and *real* value; and he then proceeds to show, from his own experience, that its value as a diagnostic agent is much more limited than is usually admitted, and that in numerous cases it is most unwarrantably employed. We are not going to enter into the field of angry and rather unprofessional controversy, which this and some subsequent papers read by Dr. Lee before the same Society have caused in London, and with which we doubt not most of our readers are acquainted; but we cannot shrink from expressing our opinion, that the indiscriminate *abuse* of the speculum in the hands of some of the London accoucheurs, as is evidenced by these debates, required some check.

Under the title of a *Supplement to a Paper on Fibro-calcareous Tumours and Polypi of the Uterus*, which was published in the nineteenth volume of these Transactions, Dr. Lee describes a case which he believes to be the first recorded exam-



ple of the occurrence of an abscess in the centre of a fibrous tumour, imbedded in the walls of the uterus. As the case is short, and remarkable in many respects, we extract it in full:

“ Mrs. S —, aged forty years, married, but never pregnant, came under my care in 1843, when I inferred, from the enlarged and hard state of the body of the uterus, shortening of the cervix, attacks of menorrhagia, and other symptoms, that one or more fibrous tumours existed in the walls of the organ. From that period till the close of 1849, I had frequent opportunities of seeing this patient, and of ascertaining by examination, that the uterus had not increased much in size during the six years that I had watched the progress of the disease.

“ About the middle of March, 1850, Mrs. S — was induced to consult another practitioner. She has stated, that six round masses, called balls, were prescribed by him for her, one of which she was directed to introduce into the vagina every night at bedtime. After four of these balls had been used, so much tenderness of the parts supervened, that their further use was discontinued. The pain having increased, the same practitioner was requested to visit the patient, and at this interview, according to the report of the patient's sister, he passed an instrument within the parts. At the time this operation was performed, little or no pain was felt, but soon after acute suffering was experienced in the region of the uterus, and incessant vomiting, with fever, succeeded. The symptoms having assumed an alarming character, I was requested to see Mrs. S — on the 15th of April. The pain and vomiting partially ceased after the application of leeches, and other remedies, but the inflammation of the uterus was not arrested, and death took place on the morning of the 18th. The day after, the body was examined by Mr. Wharton Jones and myself. The uterus was about the size of a cricket ball, and hard. The ovaria and Fallopian tubes on both sides, and the uterus and rectum, adhered together by old false membranes. Having removed the uterus from the body, an incision was made through its anterior wall, when there flowed out a quantity of greenish-yellow fetid pus. This matter had escaped from an irregular cavity in the centre of a fibrous tumour, which still contained a portion of purulent fluid. The whole lining membrane of the uterus was red and inflamed, and near the cervix appeared softened and disorganized. The anterior lip of the os uteri was of a peculiarly livid colour. The sac of the peritoneum presented no trace of recent inflammation. The cavity in the fibrous tumour from which the pus had escaped is seen in the preparation of the parts, and which is preserved in the Museum of St. George's Hospital.”

Dr. Letheby next describes a *Case of fatal Poisoning with Sir W. Burnett's Fluid*. It is, he remarks, the first case that has been recorded in which chloride of zinc caused death; and justly comments on the little notice which a substance now in

such general use with the public, and, therefore, likely to give rise to accidents, has received in our standard toxicological works. The case was that of a little girl, aged fifteen months: but it does not appear whether the solution was administered to her accidentally or not. The child survived ten hours, the symptoms being those caused by the caustic and irritant effects of the solution on the mouth and fauces, and also lethargy or a slight degree of coma. The treatment used by Mr. Miller, who saw the child, consisted in the attempted administration of albumen, but which could not be introduced into the stomach, in consequence of the swollen state of the fauces. The morbid appearances were evidently due to the local action of the poison, and chemical examination revealed the presence of chloride of zinc in the vomited matter, the fluids taken from the stomach, and the tissues of that organ. From experiments which Dr. Letheby performed on dogs, he has come to the conclusion, that the poisonous action of this solution is twofold: first, that of a local caustic and irritant; and, secondly, the production of constitutional symptoms similar to those caused by sulphate of zinc, which, as stated by Orfila, "appears to act by stupefying the brain." In a case which we saw about two years and a half ago, in which nearly an ounce of Sir William Burnett's fluid had been swallowed accidentally, the local symptoms were soon alleviated by draughts of equal parts of warm milk and fluid magnesia.

The following paper consists in the particulars of a *Case in which the Urachus remained open, and a ring-shaped Calculus, formed upon a Hair in the Bladder, was extracted through the Umbilicus*. The man was forty years of age at the time Mr. Paget, of the Leicester Infirmary, who is the author of the communication, removed the calculus, which was effected by simply introducing his finger through the umbilical orifice, when it "caught within the circle of the calculus" sufficiently to enable him to extract it. The following is the description of the condition of the opening at the umbilicus, which was congenital:

"There is a circular deficiency in the linea alba an inch in diameter, its margin being thickened and of cartilaginous hardness. Through this protrudes a hernia of the size of a goose's egg, which, in lieu of ordinary integument, is covered by mucous membrane, the surface, however, becoming dry when exposed for any length of time, as that of a vagina when inverted by complete prolapse of the uterus.

"He never makes his water while the hernia is out; for when



called to an effort for that purpose, the first act of the bladder is gradually to draw into the abdomen the whole of the protruded substance; its first contractions have no other effect, and it seems not to have power to force the urethra until that is accomplished. At the latter part of this act, at the instant of the disappearance of the hernia, there occurs a rather forcible jet of urine from the opening. The flow by the urethra also commences at this juncture, and the bladder is emptied in the usual way, the jet from the umbilicus ceasing, not to be renewed except by a violent accelerating action of the expulsor muscles. He can retain a pint of urine.

“By watching the first contractions of the bladder, it becomes evident, that to the thickened margin of the umbilical aperture are attached the muscular fibres of the bladder extended along the urachus; in fact, that the bladder and urachus are formed into a urinary receptacle, which in shape may be compared to a curved-necked cupping-glass; the urethra passing out at its lower end, and its mouth being attached by muscle to the circular aperture in the linea alba. It becomes evident, also, that the pouch of the hernia is formed by eversion of the posterior part of the neck only, which is of course attached to the upper half of the aperture, and, when protruded, presses upon the hard edge of the lower half sufficiently to prevent the escape of urine, except under straining efforts of the abdominal muscles.

“The hernia is generally out; and he wears a girdle with a thick pad of flannel to catch the jets of water which are apt to occur while he is at work.”

The patient recovered completely from the symptoms dependent on the presence of the calculus, and it was thought inadvisable to interfere with the congenital defect.

The next is a *Case of Ileus complicated by Hernia*, in which Mr. Solly performed the operation for strangulated inguinal rupture; but the patient died, from internal strangulation of the small intestine, about a foot and a half of which was found, on *post mortem* examination, lying in the pelvis, nearly black, and enormously distended. It was girt by a round and firm band, which was probably the result of old adhesive inflammation. This band was about an inch and a half in length, and consequently could not have caused strangulation, except the gut was over-distended from prolonged constipation, as occurred in this case.

The two following papers do not require from us any further notice than the mention of their titles. The first consists in an account of “*Two Cases of Absence of the Thyroid Body, and symmetrical Swellings of fat Tissue at the Sides of the Neck, connected with defective cerebral Development*,” by Thomas Blizard

Curling, F.R.S.; and the second of a *Case in which an Abscess formed in the Vesicula Seminalis, and proved fatal by Perforation of the Bladder, and Extravasation of Pus into the Abdominal Cavity*, by Mitchell Henry, Assistant Surgeon to the Middlesex Hospital.

The next essay is by Dr. Bence Jones, and contains an interesting account of a *Case of albuminous and fatty Urine*. As examples of what is termed chylous urine are very rare, the author watched this instance with very great care, having made numerous observations each day on the condition of the urine, and the effects of food and medicine on it. The case is the more interesting, as the disease is shown to be under the control of medicine, the patient being able to resume his work, after having been obliged to give it up for nine months and a half, and after having been at least fourteen months and a half ill. He was a married man, aged thirty-two years, a harness-maker by trade; he was always sober and steady, but for the last seven years had suffered much from hardship and want. He ascribed the origin of his illness "to the change of a sitting occupation for a very laborious standing one." Dr. Jones gives in detail his daily observations, which were continued for five months, on the condition of the urine, as affected by food and medicine, concluding with the following summary:

"The result of these observations, made from the 6th of November to the 7th of April, will be best seen by showing in each series the proportion of the chylous urines to the urines free from chyle, supposing 1000 observations had been made.

			In 1000 Observations	
			Chylous in different Degrees.	Free from Chyle.
Thus:—1st.	On animal food the proportion is		968 times	32 times.
2nd.	Vegetable food	„ „	910 „	90 „
3rd.	Pressure belt loose	„ „	667 „	333 „
4th.	Pressure belt tight	„ „	638 „	362 „
5th.	When matico was taken	„ „	474 „	526 „
6th.	When gallic acid was taken	„ „	17 „	983 „
7th.	After gallic acid was taken	„ „	0 „	1000 „

"The second day after taking the gallic acid, the chyle and albumen disappeared from the urine; and for the last fifty-eight days no chyle or albumen has been found to be present in it.

"For the last forty-one days the patient has resumed his work. For the last eight days no medicine has been taken, and the urine has remained healthy.

"For the next sixty-one days, namely, from the 14th of April to the end of the 14th of June, there were 311 observations of the



urine. It was never chylous. It was examined once a fortnight, each time it was passed during the day, and I have not found a trace of albumen to be present in it on any occasion.

“From the 14th of June to the end of August the urine was healthy.”

The pressure belt consisted in a stout, well-padded belt, so made that by means of straps considerable pressure could be produced on the abdomen and over the region of the kidneys. The gallic acid, which, as is evident from the above table, proved an effectual remedy for the disease, was given in very large doses, one drachm, dissolved in warm water, being taken at first in divided portions during the day. This quantity was continued for twenty-four days; it was then reduced to forty-six and a half grains daily for fourteen days, to thirty grains for seven days, and to fifteen grains for another week, when it was stopped altogether.

The concluding paper in the volume is by Dr. Theophilus Thompson, *On the prolonged expiratory Murmur as a Sign of incipient Phthisis*. He has investigated the value of this sign with much care in the out-patients of the Hospital for Consumption and Diseases of the Chest, to which he is one of the physicians; and the results he has arrived at are highly corroborative of the opinion now so generally held as to its great importance as an aid to the diagnosis of the early stages of consumption.

We regret that we cannot close our notice of this volume of the Transactions of the Medico-Chirurgical Society of London without animadverting on the careless manner in which it has been edited. Typographical errors are very numerous throughout, and in several of the communications a little attention to style, on the part of the editor, would not have been thrown away.

The index to the first thirty-three volumes of the Society's Transactions, which has been just published, reflects the highest credit on its compiler, the librarian of the Society, Dr. John Hennen; and we rejoice to see that the members have presented him with a substantial mark of their estimation of his services. It presents a perfect model of what such an index should be, containing, first, a list of the names of the contributors, in alphabetical order; second, a table of the contents of each volume, and the date of its publication; third, a list

of the engravings, woodcuts, &c., in each volume; and fourth, a general index of the authors' names and the subjects in the thirty-three volumes. This last is full and complete in every particular, occupying no less than 236 closely printed octavo pages.

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*The Morbid Emotions of Women, their Origin, Tendencies, and Treatment.* By WALTER JOHNSON, M. B., formerly Medical Tutor at Guy's Hospital. London: Simpkin, Marshall, & Co. 1850. 12mo., pp. 256.

IF an opinion of the progress of British medicine were to be formed from the character of many of the so-called medical works which of late years have issued from the Press, the conclusion which should be arrived at by every candid and intelligent observer must be derogatory to the advancement of medical science during the last quarter of a century, compared with a corresponding period preceding it. We can, however, still boast of many who, possessing natural talents, untiring industry, and patient research, have acquired high reputation, no less for themselves than for their profession.

A new race of writers has lately sprung up among us, who occupy a place between the legitimate medical author and that class, the advertisements of whose works in the newspapers of the day contain some mystical paragraph relative to the disease professed to be cured, followed by a reference to their address, added with the intention of enabling the reader to form a new acquaintance, should he be simple enough to accept the invitation.

The writers to whom we now allude do not, however, condescend to this method of bringing themselves into public notice; it would be offensive to their notions of respectability; still their mode of proceeding is apparently, though not really different. A popular medical subject is selected, the best medical authorities are quoted, hyperbole is freely introduced, and the whole with a perfect indifference to medical criticism, the object in view being to make a book for general readers; the author, nevertheless, always bearing in mind the advice of the renowned Martinus Scriblerus, that "his design should be like a labyrinth, out of which nobody can get clear but himself." To this end the writer adopts a profound obscurity in style, except in the expression of philanthropic feeling, thus rendering an appeal to himself absolutely necessary for an explanation of the doctrines he advances.



It is the duty of the medical reviewer to exhibit such productions in their true colours, not alone on account of their authors, but for the edification and amusement of his readers; and we shall, therefore, now proceed to examine the character of the work, the *catching* title of which heads this article.

The author notices in his preface the obscure character of some of those complaints to which young females are subject, and states, "that he has collected a variety of cases illustrative of each affection which presented itself to him, to form a basis on which, at some future period, a comprehensive theory may be constructed." Such he avows to be his principal object.

After a careful perusal of the book, we have failed to discover any matter of importance which may not be found in previous works, if we except some extraordinary cases, selected with marvellous industry, from various sources, but which are of no value apart from the investigation of their phenomena. From the name of the work we were led to expect that it was psychological in character; but examination proved it to be a mere compilation of the symptoms of hysteria and chlorosis, interspersed with quotations from German, Italian, and English poets, for the probable purpose of making the book more agreeable to the general reader, for whose special benefit the author has, with kind consideration, explained medical terms which might otherwise puzzle the anxious mother of some hysterical young lady. We wish to be understood as not undervaluing the importance of the subject on which Dr. Johnson treats. Every practical physician is aware of the anxiety attending the care of an aggravated form of hysteria. We scarcely know a disease more likely to enlist the kind sympathies of the practitioner, from its tedious character in many instances, its resistance to treatment, and its harassing influence on the patient and her friends; and had the writer of the work before us thrown any new light on its pathology or treatment, we should have cheerfully awarded him our approbation.

The table of contents contains some novelties which must startle even the learned in nosology. The zealous student of M'Bride, Cullen, or Good, will find newly named diseases never before brought under his notice. The "tic tic or hi-cum," the "aria magica," and the "morbus mirandus," have started into life almost by magic. In order to satisfy the natural impatience of our readers to learn something of these medical curiosities, we shall proceed to give a brief detail of the most prominent features of some of them, premising that we do not profess to enter into a minute investigation of their pathology.

The "aria magica" derives its title from the case of a patient who was observed to beat time to a tune which haunted her brain, and was discovered, by close observation, to be the air of "Protestant Boys."

"A person having sung this air, she danced up to him, and continued to dance till she was out of breath. Then the same air was played upon a fife and drum, and she danced up to the drum as closely as possible, till she missed the step, when the motions instantly ceased. They ceased also when the music was changed, or increased in rapidity beyond her power to keep up with it. A continued roll of the drum had the same effect. Here, then, the remedy was apparent, and it was always resorted to on the supervention of these strange contortions."

We may here remark, that it is not stated who was the discoverer of this special and successful mode of treatment. The anti-soporific properties of the drum are generally admitted; but we are not prepared to explain its *modus operandi* as a therapeutic agent, unless, on the well-known principle, "*similia similibus*," we are allowed, allegorically, to conclude that the *tympanitis* of the drum exercised a salutary effect on the *tympanum* of the patient! It may be said that this mode of deduction borders on that of the homœopathist: well, we admit there is a similarity, and we may possibly expect that some aspiring disciple of Hahnemann will take advantage of the hint thus thrown out, for a wide field of discovery lies before him. The disease of which our author treats probably suggests an appropriate example: if our new theory be founded on true principle, surely, in a case with marked *globus* the most appropriate remedy should be a *globule*!

The next-named disease which meets our eye is the "tic tic or hi-cum." This malady is exemplified by the cases of two young ladies, the subjects of hysteria, who were constantly affected with a motion of the head and arms, regularly occurring in accurate time, and accompanied by the words "tic, tic," like a clock; occasionally they would utter the words "I cum," or "hi cum." From these premises, the author adds a new disease to those flesh is heir to. Should he be disposed to increase his catalogue, we recommend him to take notes of cases in some large lunatic asylum; he may thus make a new nosological arrangement which must, for originality, throw those of all previous writers into the shade.

Next in order follow "gyration," the "morbus mirandus," &c., with a description of which, however, we cannot burden our pages.

A comparatively long chapter is devoted to those painful



affections of the abdomen, often of a wandering character, and which are so common in hysteria. The author has hit upon the happy idea of giving them "a local habitation and a name," and for this purpose has pressed into his service the four first letters of the Greek alphabet. This is worthy of a former tutor at Guy's Hospital, and must be allowed to be a teaching of pathology "to the letter"; thus, pain seated close to the margin of the ribs, on the right side, he calls *alpha abdominis*; pain under the margin of the left rib is denominated *beta abdominis*; pain in the left side, following the course of the descending colon, *delta abdominis*; while pain on the right side, over the ascending colon, gets the name of *gamma abdominis*. Now we would here, with great diffidence, suggest an improvement to the author's nomenclature, for we cannot help thinking that "gammon" abdominis would sound more appropriately,—this is, however, a matter of taste, and no doubt can be entertained, that, were the public familiar with such terms, a very classical mode of interrogating a patient would be afforded to the practitioner, and an hysterical young lady could, with peculiar complacency, allude to her alpha or beta abdominis. We are more impressed with the value of the suggestion, from the recollection of a patient, who, suffering from a pain in her thigh, described it to us as being seated "in the upper leg." What a relief would not a Greek name afford to persons of such delicate sensibility!

The author regards polite education as the grand cause of hysteria. The defects of the system of education, and the hygienic treatment of young females, have often been commented on and exposed by medical writers, without, as yet, the production of reformation. Still, the mere course of discipline in a boarding-school could not, *per se*, cause hysteria, except indirectly, by the precocious development of the reproductive organs. The picture given by Dr. Johnson of fashionable life in England, is by no means flattering. The following extract applies to this point, and is a fair specimen of the author's style:

"Alas! upon no sybarite bed lies she whose body is enfeebled by nights of dissipation, and whose mind is polluted by the mercenary schemes and lax morality of the gay world. Very sad, too, is the effect of that dishonourable flirtation which the *beau monde* excites and applauds. Infamous, indeed, it is to wind one's self round a trusting heart, and then, like the constrictor, to crush it between our coils. Infamous and despicable he, who, beneath the glare of the chandelier, and in the twilight of ante-chambers, waits and watches, who sighs and simpers with ready sympathy; who speaks with feigned embarrassment; is silent or eloquent, bold or timid, by cal-

culatation ; whose countenance beams with fictitious admiration, or expresses a studied languish ; who, like a piece of rubbed sealing-wax, attracts the pith ball, love, only to repel instantly on contact ! Infamous, I repeat, and despicable, is that polished Judas ! And who can heal the wound thus inflicted ? Trembling like an aspen, the deserted is carried before the physician. But can pharmacy cure the ills of flirtation, or what lotion can wash out love ? Shall we combat melancholy by mercury ? or endeavour to extract the stings of folly with the forceps ?”

The only adjective which occurs to our mind, as conveying the true description of this style, is, by a strange coincidence, the word “hysterical.” The reader will, of course, remark the romantic pathos which distinguishes the passage ; he will not fail to discover its almost hidden poetry. How smoothly run “lotion and love,” “melancholy and mercury,” “folly and forceps” !

Were we in a mood for severe criticism, we might observe, that the idea of extracting the stings of folly with a forceps is rather extravagant ; but we forbear, as the author has not described the instrument, nor the mode of operating, and these defects may be remedied in a second edition of the work.

Prefixed to the chapter on treatment is a passage from Lucian’s *Tragopodagra*, which serves as an argument for a sarcastic attack on practical medicine in general, but only applicable in particular to such practice as that of the gentleman mentioned by our author, who, having ordered a combination of opium, arsenic, prussic acid, strychnia, and quina, in a mixture, exclaimed, “These I call my great guns, and it will be hard, indeed, if they all miss fire.”

We confess to have felt a curiosity respecting the medical treatment which the author would recommend in hysteria ; but, after a minute examination of the text, we cannot arrive at any definite conclusion on the subject. He mentions various remedies, but almost in every instance concludes the sentence by deprecating their use. The only one which he vouches for, from personal observation, as being useful, is the hydropathic process ; and even this is guarded by a caution which, we may remark, is judicious. Still we suspect that the learned tutor is smitten by the charms of the fair Hydropathy ; but let her beware of the “polished Judas,” for the “gay deceiver” is already, if not an avowed, a silent admirer of her sister, the artless Homœopathy. He is evidently perplexed, and we know of no means of extricating himself, unless he follow the example of Captain Macheath, and sing,

“How happy could I be with either.”



Great stress is laid by Dr. Johnson on hygienic treatment, and it certainly is of vast importance in hysteria: moderate and well-directed exercise will frequently render service in appropriate cases. We think, however, that the author is too heroic on this point: he would have his patient "take long walks, and gallop over the turf, in order to expand the lungs, force a large quantity of air into the blood, to work the muscles, pump out the secretions, and give the cheeks the vulgar hue of the cabbage rose."

He is also an advocate for manual labour: he would send her to the "diggings," not to California for gold, but to the garden for health:—"Let her have a spade manufactured with a blade of silver, and a handle of ivory; that, at least, will not be plebeian."

Certainly not; how could vulgar notions respecting spade husbandry intrude themselves in conjunction with such an exquisite piece of workmanship?

From the character of this work, it may be supposed by some of our readers that even our short notice of it has been uncalled for. As a medical production, it is certainly beneath criticism; but its harmless influence on the public, who latterly have become such admirers of apparent simplicity in medicine, may not be so certain.

Before we part with Dr. Johnson, we would wish to give him a gentle intimation that medical writing is not his *forte*. Let him try his hand at romance or melodrama; in either he might have a proper field for the display of his talents. But in whatever way he may please to exercise his pen, we can have little hesitation in asserting, that, in the words of a *profound* poet,

"None but himself can be his parallel."

*Guide Pratique aux principales Eaux Minérales de France, de Belgique, d'Allemagne, de Suisse, et d'Italie.* Par le Docteur CONSTANTINE JAMES. Paris: Victor Masson. 1851. 8vo. pp. 523.

THE facilities afforded within the last few years by railway travelling on the Continent of Europe, render it more than ever necessary for the physician to be acquainted with those aids to health which the numerous mineral waters that abound throughout it offer to the invalid. Our readers will, therefore, we are sure, feel grateful to us for bringing under their notice this work of Dr. James, which has only just issued from the

beautiful press of M. Masson. It contains a most complete description of the spas of France, Belgium, Germany, Switzerland, Savoy, and Italy, with an account of their chemical composition, their effects on the constitution, and the diseases in which their use proves beneficial.

The classification of mineral waters, according to their chemical composition, is that usually adopted by writers on their history; and Dr. James, unwilling to depart from this custom, gives a short preliminary chapter on their chief characteristics, under the divisions of sulphureous, ferruginous, alkaline, gaseous, muriated, and bromo-ioduretted waters. But he considers that this arrangement neither fulfils the requisites of science, nor is adapted for correct description, although he admits that it has the unquestionable merit of grouping them together into a certain number of families, distinguished by chemical characters sufficiently well marked to simplify their study. We agree with him that the plan he adopts, of describing them in geographical order, though less scientific, is more practically useful in our present state of knowledge, and is certainly much better adapted for such a work as his, which must partake so much of the nature of a handbook. In his remarks, however, on the mineral waters of each country, he endeavours to bring them as much as possible within the range of his preliminary classification, "with the view," as he says, "of combining the requisites of science and facility in description."

He appends to his book an interesting account of the *natural* vapour baths of Ischia, which is an island close to Naples; of Pozzuoli, on the bay of Naples; and of the celebrated baths of Nero or Tritoli, situated a short distance from Pozzuoli, not far from Cape Misenum. Dr. James gives the following graphic description of the latter, and of a visit which he paid to them.

"These baths exist in an excavation made on the southern face of the mountains of Baia, about fifty feet above the level of the sea; access being procured to them by means of a pathway cut in the rock. The waves wash the foot of the hill on which they are; and on its summit was formerly situated a palace, communicating with the baths by means of splendid galleries, some arches and columns of which still exist. . . . The interior of the grotto is divided into four compartments, which communicate with each other: light being admitted by orifices which face the sea. In each compartment there are numerous tables of lava, hollowed out so as to contain mattresses on which persons may recline, so as to receive a fresher air after coming out of the baths. In ancient days, statues, indicating the names of the diseases which the baths were supposed to cure, were ranged



around; the only remnants of which at present are empty, mouldering niches.

“The entrance hall is the largest, being about thirty feet in length and fifteen in width, and on its floor is an opening like the mouth of an oven, from which a cloud of hot, moist vapour arises. This is the orifice of a fissure which communicates with the source of the vapour.

“The guide is a miserable-looking little old man. His excessive leanness, his dry and horny skin, and his asthmatic breathing, indicate but too clearly the unwholesome occupation in which he is daily engaged. Indeed his sole employment is to pass through the stifling atmosphere to bring up a bucket of water from the source, in order to amuse the visitors, who plunge eggs into it, which are boiled in five minutes.

“We had scarcely entered, when the guide lit a thick torch of resin to give him light in his descent to the source of the vapour. I had the curiosity to accompany him, chiefly because it afforded me an opportunity of repeating some of the experiments on animal heat which Magendie had a short time previously published.

“The guide and I both threw off our clothes, and he with his torch and I with my thermometer proceeded into the passage, which was about seven feet in height, and less than two and a half feet in width. The temperature was  $104^{\circ}$  F. at a height from the ground, and only  $91^{\circ}$  F. close to the surface; thus the heat was either stifling or bearable, according as the head was carried erect or held down. The difference is due to the physical cause, that the cooler layer of air, being the heavier, is always the lower. The warmer and cooler air constitute a double current, from the escape of the former outwards, and the flowing of the latter inwards: so that, if a torch is held near the top of the arch, the flame is directed outwards; and if near the ground, inwards.

“We advanced a few steps. The passage soon changed its direction, and then became sinuous. I proceeded with my body bent downwards, and my head kept as near the ground as possible; whilst the guide, in consequence of his low stature, but more especially from his acquired habits of *incombustibility*, disdained such precautions. After having advanced about 130 feet, we arrived at a point where the passage turned off at almost a right angle. The numerous persons who come here daily to take a vapour bath rarely penetrate as far as this, stopping a few paces within the mouth of the entrance. . . . The thermometer now stood at  $109^{\circ}$  F. at the top of the arch, and at  $98^{\circ}$  F. at the bottom. I began to suffer much from the heat, and my pulse rose from seventy to ninety beats in the minute.

“After a halt of a few moments we proceeded: the temperature increased, the passage became narrower, and, instead of the slight inclination which it hitherto presented, it now descended suddenly, so that even the guide himself walked with great difficulty. I continued to follow him, but, no longer able to hold my head up to

prevent the blood from gravitating to it, I knelt on my knees, and holding on with my hands and feet to the projections of the damp surface, I allowed myself to glide backwards. My temporal arteries pulsated strongly; my breathing was difficult, short, hurried, and panting; my body throbbed all over, and my pulse was 120 in the minute: quite exhausted, I stopped every moment, and applied my mouth eagerly to the ground, to breathe the least burning layer of air. The upper current now indicated  $118^{\circ}$  F., and the lower  $113^{\circ}$  F. We were enveloped in so dense a vapour that the flame of the torch, which exhaled a fetid smoke, appeared only as a brilliant point in the centre of a luminous ring.

"We still descended, the atmosphere became more and more suffocating; I felt as if my head would burst, and a phosphoric light seemed to play around me: I was scarcely conscious of any sensations. 'At last,' thought I, 'should I want help, could I make myself heard?' I called aloud:—I listened:—but I heard nothing save the noisy breathing of the guide and myself.

"Suddenly the surface became level, and a slight bubbling indicated that we were at the source. There it was: but the vapour was so dense that the guide had to hold his torch close to each object to render it visible.

"As well as I could see, the water spouted up in a twisted stream, through a hole pierced in the bottom of a small basin, and near it was a stone on which the guide knelt to fill his vessel.

"I dragged myself to this spot with my thermometer in my hand, but I confess my strength nearly failed me; the mercury indicated  $122^{\circ}$  F., and there was no difference between the upper and the lower layers of the vapour. My pulse beat so quickly that I could not count it; I felt that, were I to give way to my sensations, I should fall into a state of asphyxia. The guide plunged my thermometer into the spring, the temperature of the water was  $185^{\circ}$  F.: at the same time he filled his pitcher at the first basin, the depth of which appeared to me to be about a foot and a half.

"I had now attained my object, and I summoned up all my energies to escape from this *frightful furnace*, which I regretted that I had ever entered. . . . As soon as I reached the open air I almost fainted, I could scarce walk, I staggered like a drunken man, and my pulse beat 150. Blood, happily for me, burst from my nose, as it flowed I felt relieved, my respiration became easier, and I began to collect my ideas. I was altogether more than a quarter of an hour in the bath, and the guide, who was not in the habit of staying in so long, suffered nearly as much as myself.

"The water which we had obtained from the spring was perfectly clear, limpid, and inodorous; its acid and saline taste resembled that of the Pullna waters, of the purgative properties of which it partakes; it is not gaseous, for if it exhaled carbonic acid we should have been asphyxiated; nor does it leave any deposit on cooling. I had it afterwards analyzed at Paris, when it yielded considerable quantities of the salts of lime, soda, and magnesia.



“ During the night, on my return to Naples, my pulse beat 100, I suffered from slight fever, and singing in my ears, and a sort of tingling all over my body. On the following morning I felt only a slight sensation of fatigue, but M. Magendie remarked that my eyes were injected with blood, and this did not disappear for two or three days afterwards.”

The author gives also an account of *natural* gaseous baths, enumerating, however, only two,—namely, the well-known *Grotto del Cano* in the neighbourhood of Naples, in which a layer of carbonic acid gas is always present on the surface of the cave; and one close to it in which *ammonia* is present, singularly enough, not, as should be expected, at the *top*, but at the *bottom* of the cave, close to the soil. This Dr. James believes to depend on its being combined with carbonic acid.

After a reference to sea-bathing, the author notices, very concisely, the mineral waters of England, and we were certainly not a little amused with his concluding paragraph on them:—“ English customs,” writes he, “ have in all things a stamp of originality: thus, it is in winter, and not in summer, that mineral waters are resorted to in that country.”

The work, in fine, is concluded with a resumé of the principal diseases in which mineral waters are found to be beneficial, and an indication of those suited for the treatment of each is given.

We cannot part from Dr. James without again commending his book most highly, and recommending it in the strongest terms to our readers, as sure to afford them correct information on a subject immediately bearing on the practice of medicine in the present day.

*Die geburtshilfliche Praxis, erläutert durch Ergebnisse der II. Gebärklinik zu Wien, und deren stete Vergleichung mit den statistischen Ausweisen der Anstalten zu Paris, Dublin, u. s. w.*  
Von Dr. F. H. ARNETH, Assistent an der II. Gebärklinik zu Wien. Wien: Braumüller. 1851. 8vo. pp. 254.

*Practical Midwifery, illustrated by the Experience of the Lying-in Hospital at Vienna, and by a Comparison of it with the statistical Results of the Institutions at Paris, Dublin, &c.* By Dr. F. H. ARNETH, Assistant in the Lying-in Hospital at Vienna.

THE lying-in department of the *Allgemeine Krankenhaus*, or Universal Hospital, at Vienna, contains about 400 beds, and

the number of annual deliveries is about 7500. It is divided into two clinics, each under the direction of a professor, an assistant, and a head midwife. In one of these clinics the female pupils are instructed, and in the other the male pupils<sup>a</sup>; Dr. Arneth was assistant to the former. This office usually lasts for two years, but our author held it for three. In the present work he gives a report of all the cases delivered under his care, during the first two years of his connexion with the hospital, namely, from October 15, 1847, to October 15, 1849, within which period 6527 women were confined under his observation.

The first twenty-six pages are occupied with a description of the lying-in hospital, and a minute account of its internal management and economy. This forms a very appropriate and valuable introduction, and well deserves attention from those connected with similar establishments. A few of the rules having reference to the patients may be here noticed. They are very commonly admitted in the eighth month of pregnancy, unless the hospital is much crowded; and they remain in until the tenth day after delivery, or longer, if necessary; then they are permitted to return home, and may or *may not take their children with them*. In the latter case the children are received into that division of the general hospital set apart for foundlings. The "pay-wards" of the hospital possess the following extraordinary privilege, that so long as a woman remains there she is beyond the reach of the law, no matter of what offence she may have been guilty. In each clinic is one chamber, where all the women are brought to bed, and in three hours after delivery they walk back to their ward. The eighth day is the soonest on which the puerperal patients are allowed to sit up; but from the first they get animal food, in the form of a very weak bouillon.

In treating of the different varieties and complications of parturition, the course pursued by Dr. Arneth is, first, to describe briefly the practice of the Vienna Lying-in Hospital, with respect to the particular subject under consideration, and then to append the statistics of it and of other institutions. The authors whose works he most constantly quotes from, as containing the largest amount of statistical information, are Lachapelle and Boivin, of the French; Collins, and M'Clintock and Hardy, of the Irish; and Boër, Klein, and Bartsch, of the German. Besides these, however, the writings of many other accoucheurs are occasionally referred to.

<sup>a</sup> See vol. ix. New Series of this Journal, p. 133.



We hail with much pleasure the appearance of this excellent work ; for the Vienna school of midwifery, though possessing such a magnificent hospital, has contributed but little to obstetric science, if we except the works of Boër and Helm, and the short clinical report of Klein and Professor Bartsch. The volume before us, therefore, is a production long due ; and not only does it well sustain the reputation of the school from which it has emanated, but reflects the highest credit upon the industry and the judgment of its author. The habitual observation and unremitting perseverance that must be exercised, in collecting and arranging the data for a book of this kind, involve so much trouble, that few men are willing to encounter the difficulties and the cares of such an undertaking.

As it would be impossible to give a full analysis of Dr. Arneth's report, we propose laying before our readers the practice of the Vienna *Gebärhaus* in those matters where it differs most from our's. These extracts will be sufficient to exhibit the character of the book, and at the same time must possess most interest for general readers. The report, it will be remembered, extends over a period of two years ; during which time 127 of the women who had been delivered died, that is, about 1 in 51. The total number of children born was 6608 (there having been 81 twin cases), of whom 224 were born dead ; being a proportion of 1 in  $29\frac{1}{2}$ <sup>a</sup>. Of the entire number of children, 95 were delivered by the assistance of art, viz.:—4 by the perforator and crotchet, 45 by the forceps, 44 by turning, and 2 by the induction of labour. What strikes us most in these numbers is the great frequency of turning and forceps operations, and the extreme rarity of craniotomy. Here the disparity between Dublin and Vienna practice is very wide. If, however, we compare the average frequency of all these operations, without distinction, at Vienna and at Dublin, this difference almost entirely disappears. Thus, in Dr. Arneth's report, the number of operations to the number of deliveries is as *one* to *sixty-nine* ; and in Dublin, according to the combined statistics of Collins, and M'Clintock and Hardy, the proportion is about *one* in *seventy-three*. Of the 95 children above-mentioned, 62

<sup>a</sup> It is right to mention that Dr. Arneth considered every child as *born alive* whose heart was pulsating at the time of birth. We, on the contrary, have generally reckoned a *fœtus dead-born* in which respiration could not be thoroughly established ; and this agrees with the definition of the French Civil Code, and also accords with the English law, so far as it bears upon the point. As the numerical results of a large practice would be very much affected according as one or other of these definitions is adopted, it is of importance that obstetric reporters and writers should define their idea of a "live-born child."

were born alive, and 49 of these survived till the ninth day. Of the mothers of these children *eleven* died.

In the management of natural labour, the practice is essentially the same as that which is followed here. During the act of parturition, the woman is allowed to lie on her back or her side (as with us), the latter being the more common. For overcoming rigidity of the os uteri, that frequent source of delay in first labours, time and the warm bath seem to be the only remedies employed; bleeding, tartar emetic, leeching the os uteri, and belladonna topically applied, having no place in the treatment. Of the effect of this mode of practice we cannot form any exact opinion, as no table of the duration of labour in all the cases is supplied. In two cases of insuperable rigidity of the os uteri, incision was performed. One of these was a case of carcinoma uteri, and in the other the whole vaginal portion of the cervix had been amputated some years before. The former of these women recovered, but the other died on the third day. The ergot of rye seems to have been used in a very small number of cases:

“We used the *secale cornutum* in only a few cases. We gave it in the form of powder, in doses of five grains every five minutes, to the extent generally of half a drachm. We look upon this medicine as very uncertain in its influence upon the pains. Sometimes its operation was very manifest; often it produced no effect. Once only had I reason to believe that the death of the foetus was plainly ascribable to the *secale*.”

The forceps, we have stated, was employed in *forty-five* cases. Of these we shall now give a summary: twenty-two of these women were primiparæ: *twenty-eight* times the operation was indicated solely from uterine inertia; *five* times from this, together with slight narrowing of the pelvis; *three* times from contraction of the pelvis alone; *five* times from convulsions; *once* from this cause and hemorrhage; *once* from prolapse of the hand with the head; *once* from prolapse of the funis; and *once* in a breech case. *Thirty-two* were able to leave the hospital on the tenth day (one of these got vesico-vaginal fistula); *seven* women died; the rest recovered slowly. The vectis, or extractor, was never employed. Dr. Arneth's description of the forceps used on all occasions in the Vienna Hospital is as follows: extreme length, fifteen inches; length of blade, eight inches; distance between the tips, two and a half lines. The lock is Smellie's; and in this situation there is a projection, or hook, on the outer side of each blade, to which the middle and index fingers are applied in extracting: in this respect it re-



sembles the forceps of Brünninghausen, of Nægelé, and of Dubois. Some of his remarks on this obstetric instrument are very good; we quote two of them:

“We are so far from pretending our forceps to be the best. We entirely agree with most accoucheurs that, except some few totally unfit instruments, that instrument is the best to which the operator is most accustomed. . . . . Well remembering that the forceps, even in cases that look least dangerous, is always ‘an iron hand,’ we do not employ it, except with great reason, and in carefully selected cases.”

The forceps was never resorted to unless the os uteri was fully dilated, and the head had entered the cavity of the pelvis; so that the *long* forceps (for performing the *high* operation) was not employed. The rules for turning the child are nearly the same as are here observed. The woman was sometimes placed on the back, and sometimes on the side, and one foot only was seized. Either hand was used, but the left was more commonly preferred, as being smaller and more pliant than the right. Mr. Roberton, of Manchester, in a work very recently published, has expressed himself strongly in favour of turning with the left hand; his words are:—“In turning, which of the hands ought to be used? The answer to this is, *that hand which corresponds to the side of the body on which the patient is lying*. In this country she lies on the left side; and the operator should, therefore, use his left hand, because with it only can he operate, and at the same time maintain a regard to the axis of the passage. It is difficult to overrate the importance of this, as long experience has convinced me.”<sup>a</sup> To us it appears that, in cases where much opposition is likely to be endured in the operation, the superior strength and muscular power of the *right* hand, generally speaking, should entitle it to a preference. Dr. Arneth records *forty-four* cases of turning, viz.: *thirty-two* times for transverse presentation; *six* for placenta prævia; *three* on account of narrowing of the pelvis; *twice* where both arms had descended with the head; and *once* where a foot descended with the head. Of the forty-three mothers, there having been one twin case where both children were turned, *three* died, viz., the twin case, a patient who had placenta prævia, and one in whom version was resorted to from deformity of the pelvis. Of the children, fourteen were dead-born, and six of the remainder died before the tenth

<sup>a</sup> Essays and Notes on the Physiology and Diseases of Women, and on Midwifery. By John Roberton. 1851.

day. Dr. Arneth seems rather favourable to the practice of turning in cases of slight pelvic distortion, where this has been proved to exist by the history of former labours. He relates two or three instances of its successful performance, but also mentions some, where the child was not only lost, but where enormous difficulty was experienced in delivering it; and even of the three in his report, two had to undergo perforation before the fœtus could be removed. Of the three cases belonging to the report, where this procedure was had recourse to, one perished.

The practice of the hospital in the treatment of prolapse of the funis seems to have been attended with remarkable success, as out of thirty-three examples of this accident, twenty-two children were born alive; and of the dead children, seven were putrid. The particular mode of treatment most frequently adopted in these cases, and with the best effect, was reduction. This was done not by simply pushing the cord above the head with one or two fingers, but the whole loop of funis was taken into the hollow of the hand, and carried fairly above the head, and lodged in the hollow of the child's neck. Dr. Arneth states, that of forty cases collected by him from his own practice, and that of Klein and Bartsch, where this mode of taxis was followed, thirty-eight of the children were born alive, a result that seems almost incredible. He very properly enjoins us not to infer that the child is dead, and consequently to abstain from all attempts at saving it, because, when first called, we may not feel any pulsation in the funis; and he gives four instances where no pulsation was discoverable when he reached the patient's bedside, yet prompt reposition was performed, and the children were preserved, though certainly one of them required four hours' care and exertion before respiration was satisfactorily established.

The practice of the Vienna Hospital, in respect to unavoidable hemorrhage, differs in no essential particular from that pursued here. In cases of partial presentation of the placenta, rupturing the membranes was found sufficient to control the flooding. The diagnosis of these latter cases is sometimes a matter of considerable difficulty. The fact of the membranes being much thicker in the vicinity of the placenta than elsewhere, has supplied Dr. Arneth with a diagnostic to which he is disposed to attach some value. He states that this difference in the feel of the membranes is easily recognizable to the educated finger; and that on many occasions it correctly led him to suspect that the placenta was in an abnormal position, near to the os uteri. He gives *nine* cases of partial and complete



placenta presentation: only *one* died. In *two* cases no active treatment was adopted; in *one* the membranes were punctured; and in *six* the children, three of whom presented with the arm, were turned. *Four* of the children were born alive, but two of these died within a few days afterwards. No notice is taken of artificial extraction of the placenta in cases of this description. He only alludes to three cases of accidental hemorrhage; one of these was in the second stage of labour, and yielded to cold applications; the other two were successfully treated by rupturing the membranes. In common with Rigby and others, Dr. Arneth has had occasion to remark the great frequency of hemorrhagic cases at particular times; and this he attributes to atmospheric and telluric influence.

In the medical treatment of convulsions, bleeding to a small extent, and tartar emetic, are the only remedies employed. *Thirteen* examples of this complication are recorded, of which *four* died, *six* were delivered by the forceps, and the rest by the natural efforts. In one of his cases the woman had forty-five fits; she, nevertheless, recovered, but was for some months afterwards insane.

Of rupture of the uterus, no case, strange to say, occurred during the period embraced by Dr. Arneth's report.

In one of his years there were 243 premature confinements, being in the proportion of one to fourteen of all other labours. These children presented in the following way, viz.:—19 with the feet, 21 with the breech, 2 with the arm, and the rest with the head; 189 children were born alive, and of the whole number 120 were boys. The proportion which the preternatural presentations bore to the whole number of premature births was one to five, thus corroborating the observations that have been made on this point by Dubois, Cazeaux, M'Clintock and Hardy, and others. Dr. Arneth states that syphilis was a very frequent cause of premature labour. In the period of two years he saw ninety-nine women affected with this disease, being nearly *one* in *sixty-six* of all cases. The seventh part of the syphilitic women had not come to the full time; and of their children, one in nine was dead-born.

Dr. Arneth narrates six cases in which the uterine tepid douche, recommended by Kiwisch for the induction of premature labour, was tried; and in all but one it succeeded. The mode in which it is applied is as follows. A basin of tepid water is placed at a height of twelve feet from the floor; from the basin a tube is conducted, the upper half of which is rigid, the lower half flexible. Whilst the woman sits, this is introduced into the vagina, so that the current of water is projected

against the os uteri. This is done usually twice a day, and the number of "sittings" required, before parturition sets in, is very uncertain; twelve or thirteen douches are about the average; but in one patient the second douche provoked labour; in another, eighteen were required; and in a third patient, upwards of thirty were received, without any impression being made. In one case Dr. Arneth thought that the douche had the effect of changing the position of the foetus in utero.

Chloroform does not seem to have been much in favour, as it was only used in five cases, all instrumental deliveries. One of these women was kept for two hours under its influence.

In cases of retention of the placenta, the general rule was to wait for three hours, unless hemorrhage demanded its removal sooner. The report contains thirty-one cases in which the artificial extraction of the after-birth was practised. In *ten* of these the operation was necessitated from hemorrhage; in *eleven*, from morbid adhesion; in *six*, from these two circumstances combined; and in *four*, from hour-glass contraction of the uterus. *Five* of these women died, and all of them belonged to the cases of morbid adhesion. Dr. Arneth's opinion, as to the danger of this piece of manipulation, is the same as that we have always entertained:

"This operation is a very dangerous one, and proves especially so in cases of very intimate adhesion. Of these mothers, more than the half became ill, and nearly one-third died. On the other hand, only one-seventh of the mothers were ill where it was performed on account of hemorrhage only."

Hemorrhage, after the expulsion of the placenta, was combated by friction over the uterus, the removal of coagula, and the injection of cold water into the vagina. Ergot does not seem to have been employed, nor the introduction of the hand into the uterine cavity. Three cases of "secondary hemorrhage" are recorded. In one it took place on the fifth day; in one on the sixth; and in one on the eighth day. It is reasonable to suppose that the rule of the hospital, requiring confinement to bed until the eighth day, must have operated very materially in repressing a tendency to secondary flooding, and consequently in diminishing the frequency of this untoward event.

The numerical relation which twin cases bear to all others in this report is as one to eighty, there having occurred *eighty-one* such births. *Four* of the mothers died; rather a high mortality. Dr. Arneth mentions having met with an anatomical deviation, the possibility of which has been strenuously denied



by some ovologists, viz., two fœtuses of different sexes, inclosed within *one chorion*, but each having its own proper annion.

The Cæsarean operation is a subject to which much attention has recently been drawn ; it may not be uninteresting, therefore, to state the opinion of Dr. Arneth, which may be considered to represent that of the Vienna school generally. With almost the entire body of British practitioners, he thinks it is a measure in the employment of which we are only justified by the absolute impossibility of delivery *per vias naturales*. His reasons for maintaining this rule, so much opposed to the prevailing doctrines in the rest of Germany and in France, are clearly and concisely put forward, and are essentially the same as those which have always actuated the obstetricians of Great Britain. In corroboration of his views, he refers to the statistical researches of Kayser, who has collected and analyzed the results of 338 cases of gastrotomy ; of which number 210 proved fatal ; and of the children, 86 were dead-born, or perished very soon after birth. In France, M. Cazeaux is, we believe, the only author who has avowed the same sentiments upon this important question. Dr. Arneth's report contains *four* cases in which the Cæsarean operation was performed immediately after death, and in *one* the child was saved. He mentions four instances which occurred in the Vienna Hospital, of children rescued in this manner from certain destruction.

Two very uncommon forms of puerperal fever are described, which visited the hospital, carrying off a great number of patients, in the autumn of 1849, and in the beginning of the following year. The first of these showed itself by an ulcer on the pudendum, close to the fourchette, exhibiting a phagedenic tendency, and rapidly spreading to the vagina, perineum, and other adjacent parts. This appeared soon after delivery, and the patient generally sank upon the sixth day of childbed. Some of these patients evinced symptoms of metro-phlebitis ; and in all of them traces of it were discovered after death. In the other group of cases, the disease manifested itself in the form of erysipelas, beginning at the nates, and spreading down one or both legs. Many of the women so attacked died, and presented, on *post mortem* examination, the usual marks of uterine phlebitis, though very few of them had made any complaint of uneasiness in the belly. Purulent deposits occasionally took place amongst these patients, and very usually occupied the same situation, namely, the front of the upper arm and the calf of the leg. Two cases of rapid destruction of the eye, from metastatic inflammation, are narrated ; both died. In one of these, the complete disorganization of the eye was

effected within two hours from the first symptom of the attack ; and in the other the same took place in eight hours.

Cholera made its appearance in Dr. Arneth's division of the hospital in the beginning of June, 1849, and did not disappear until the middle of August, during which time twenty-four patients (ten undelivered) were seized with it ; and his experience confirms that of Helm, in the observation, that every woman delivered after an attack of the disease gave birth to a putrid child. Strange to say, although puerperal fever was rife in the wards up to the time when cholera broke out, and immediately after it disappeared, yet during this interval of more than two months, comparatively speaking, hardly a case of it occurred, as if the presence of the new pestilence had for the time being effectually expelled the old and no less dreaded one. This is most remarkable, and bears out the idea that two epidemics can never coexist in a state of intensity. In connexion with this, we may mention the fact, that during the year 1832, when cholera was so fearfully prevalent in this city and country, Dr. Collins' mortality in the Lying-in Hospital amounted to only twelve deaths, being at the extraordinarily low rate of 1 in 186.

Dr. Arneth states, that, with one solitary exception, he never saw a woman die in the puerperal state who did not exhibit, after death, some organic lesion in the genital system or abdomen. In the exceptional case, the patient died quite suddenly, a few days subsequently to confinement ; and, after a careful microscopic examination, the cause of this event could only be referred to anemia of the brain.

We must now bring this notice to a conclusion, and sum up our opinion of the work in a few words. So largely have we borrowed from its pages, that no space is left us for criticism. But Dr. Arneth's book is of a kind that does not challenge, or fairly admit of such, his object having been simply to lay facts before us ; and this he does in so unostentatious a manner, that, even were we so inclined, we could find little to cavil at. We are free to state, however, that in some statistical details the report is deficient ; but this fault does not rest with Dr. Arneth, but rather results from the customs and regulations of the institution where he acquired his experience. In the three great questions, the ages of patients, the duration of their labours, and the number of their pregnancies, the information is very meagre and unsatisfactory. The treatment of some of the complications of labour and of the puerperal state, appears strongly tinged with the medical scepticism, the *laissez faire* doctrines, of the "young physis school" of Vienna. Dr. Ar-



neth in this report has made a valuable and permanent addition to obstetric literature, and has given abundant proof of good judgment and untiring industry ; so that we may justly expect from him a useful and brilliant career, should his zeal and diligence meet with their proper reward.

*Eléments de Morphologie Humaine, Physionomie de Relation. Localisation physionomique des plis faciaux représentatifs des différents Actes de Relation ; Physionomie naturelle. Genèse des formes ; Loi d'Ordre universel ; Physionomie anormale. Appréciation des Lois, des Theories, et des Faits, relatifs à la Genèse des Organes ; pour servir à l'Étude des Races.* Par J. E. CORNAY (de Rochefort), Docteur en Médecine de la Faculté de Paris, Membre correspondant de la Société des Sciences de Rochefort, de la Société des Sciences naturelles de la Charente-Inférieure, Membre de la Société ethnologique de Paris, etc., etc. Paris : Labè. 1850. 18mo. Three parts, pp. 117, 134, and 95.

To connect the material with the spiritual has been the favourite dream of mankind since the creation ; but, alas ! with how little fruit has the labour been attended ! Where are the results of Plato, and of the other philosophers of Greece ? In how much has science been benefited by their labours, except in the failure of their theories ? Metaphysics now belongs to the domain of the archæologist or the lawyer, or is gone to live with the gnomes of the Harz, or with some dreamy theologians in the universities of "Vaterland." Ever and anon, however, a fit of enthusiasm seizes upon the hoary old sage, and he visits other lands, and startles the world by producing pretty phantasmagoria, which, unfortunately, are still capable of fascinating the mass of the public, there being great license of doctrine allowed to his votaries. A pity that such a noble "science" should decay ! What a field it afforded to the speculative genius, who wished to acquire fame by writing elegantly upon nothing ; and to the scholastic pedants, who always mistake the means for the end. But in place of the "ego," and the "non ego," and such other names for *nonentities*, what have we gotten ? Positive science : the science of facts connected by induction, as distinguished from *negative* science or the science of names arrived at by deduction. Since this substitution of things for names, nearly all the phenomena of nature have been observed ; and each day adds a fresh triumph to those already gained by the philosophy of observation. The most intricate

and complex laws, those of organic life, are fast revealing themselves; and a light is rapidly being shed over that mythical field of science called philosophic medicine, to the great discomfort of those who were accustomed to think that a subject was sufficiently examined when they had given it a new name. Alas! all "sympathy" is disappearing from the world; and even the pathological chemist's "extractive matter" is being sacrilegiously examined.

Convinced, therefore, that, unless amongst lawyers and theologians, metaphysical jargon was rapidly disappearing from the world, we took up Dr. Cornay's book, attracted, in a great degree, by the word "*Morphologie*," but, also, in some measure, we must confess, by the titles of the learned author: for an appendage to a name is, in these reading days, more useful than formerly, and we must confess that we are ourselves sometimes attracted by it, especially when we wish, as Dean Swift said, "to make the acquaintance of a book, as most people do that of a lord: learn his title, and then brag of his acquaintance," in the hope of finding some information of a new kind.

Now it so happened that we opened the volume at page 71, Part I., and read the following passage: "*The soul (l'âme, l'archée) is nothing else than the organic fluids, fluids which give form, which build up the being and which consequently animate. These fluids exist, according to us, before the organs, and during the act of fecundation; the sperm, which is properly charged with them, disengages and polarizes them in the ovule. Subsequently, there is a development of the embryo at a first point of polarization, which betrays itself by a white speck, which is called the cicatricule, and which is perceptible in the ovule.*" Here was an important discovery! But what were these extraordinary fluids? Surely the author could not have merely changed the name of some already well-known bodies; he must have investigated the fluids. In page 40, Part II., he gives the resumé of these "investigations." According to him the Supreme Being reveals himself: "1st. In elements, fluid, solid, liquid, and gaseous, simple and indestructible. 2nd. In polarizations and in depolarizations, in progressions and in proportions, in co-existences and coincidences of the fluid, solid, liquid, and gaseous elements. 3rd. In material, vegetable, and animal forms, created and destructible. The formula of the Being is (to be, is, being)." Further on in his chapter entitled "analysis and synthesis of the progressions and the proportions of the fluid, solid, liquid, and gaseous elements," he adds: "The progressions and the proportions of the elements reveal themselves according to species:



1st. *Material*, by the combinations of solid, liquid, and gaseous elements of *qualities and in quantities, determinate, specific and material*, which are produced by means of fluid elements of *qualities, and in quantities determinate and specifically material*. These fluid elements (electrical, caloric, luminous), latent in specific proportions in material species, are named chemical fluids; they are portions of fluid rays (rayons) polarized, centralized in progressions and in proportions of the solid, liquid, and gaseous elements of material bodies (espèces); from whom are derived the portions of waves of non-polarized fluids, which constitute the *vegetable-organic fluids* . . . . . These portions (fractions) of latent rays, in *specific proportions* in vegetable species, are called *vegetable organic fluids*, fluids which are portions of rays polarized, centralized in progressions and in proportions of material bodies, forming vegetable species, whence result the portions of rays of non-polarized fluids, which constitute the *animal organic fluids*." The vegetable world, therefore, presents the second revelation of the progression, &c., the animal world the third, which he describes in the same language. Finally, he sums up his synthesis in the following words: "The quantities (doses) of fluids (or imponderable fluids in determinate quantities and of determinate qualities), with which the material, vegetable, and animal species are endowed, or the latent fluids, constitute the material, vegetable, and animal souls. These fluids, once separated from the solid, liquid, and gaseous elements, having form, return into the common reservoir of fluids between the worlds, ready to animate other elements about to assume form; they do not remain in the state of centralized souls, fluttering about, as certain persons who abandon themselves to faith believe, but as simple imponderable fluids." Here we have a complete theory of the universe: a *rayon*, polarized and centralized, of Hegel's pantheism. With this theory he explains the growth of vegetables and the formation of animals from a number of atoms imbued with certain proportions of his organic fluids, which are continually polarized and depolarized; the type or form of the molecule depending upon the quantity and the quality of the latent fluids. When the same quantities of these fluids act upon similar atoms, the type remains permanent; and as one group of atoms imbued with life is capable of acting upon and causing a coincidence of similar phenomena in similar atoms, the type is propagated; and as the action of such groups of atoms must evidently be weaker upon differently circumstanced groups, and hence the *coincidence* of similar types,—that is, progression of the same order of atoms does not interfere with the *co-existence*

of other types; in other words, does not affect the simultaneous existence of great numbers of different types. In this way he explains why different globules in the animal body give rise to different organs. He also applies it to the different races of men, as well as to the views of MM. Serres and Isidore Geoffroy-St. Hilaire, Flourens, &c., upon the *formation* and *deformation* of zoomorphous bodies, and in support of his views that these phenomena are regulated by the law of the Supreme Being (that is, matter in its unformed state); and that everything is formed and deformed by polarization and depolarization, by progression and proportion, by co-existence and by coincidence, that is to say, according to the law of universal order. In illustration he gives the histories of several cases of genital malformations, illustrated by the most unintelligible plates we ever saw.

Our readers will, perhaps, exclaim, that the description of M. Cornay's fundamental theory (it is the idea of the whole book) is nonsense, at which judgment we shall not be offended; for, although we have done all we could to understand the object of the book (which was forwarded to us with a special request from the author for a review) and nature of the views intended to be inculcated, we came to the conclusion that it was a dilution of the pantheistic fluid of Hegel, mixed with *indeterminate* quantities of the author's own crudities, given in the most unintelligible series of phrases we ever read. His idea, that we could not hope to know anything of the formation of animals or vegetables, &c., until we knew the laws of the condition of existence, simply asserts that the required *preliminary* knowledge is, in fact, the *last* point to which we can hope to arrive. This species of writing cannot be too much deprecated; and it is, therefore, high time that the science of physiology should be purified from such dross, and all should strenuously unite to banish metaphysics from medicine, its last stronghold among the sciences.

For the last century a great number of attempts have been made to found a science of life. Lavater, in his extraordinary work, pointed out the curious relations which subsist between the physiognomy and the passions or feelings. He did not, however, analyze this relation; and, unfortunately, mingled a great deal of vague metaphysical nonsense with his otherwise important observations. Gall, and his illustrator, Spurzheim, next entered upon the task, and the result of their labours has been the foundation of Phrenology, which, with much that is good, contains a vast amount of error, for it is unnecessary to say that the brain is not a collection of little brains, each hav-



ing its own proper territory upon the external surface of the skull. About the same time that Gall announced his opinion upon phrenology, Mesmer commenced making known his experiments upon the action of one living body upon another; unfortunately, however, Mesmer was too much of a charlatan, and the subject was too strange and too imperfectly known to merit the serious attention of philosophers, and the matter became, in consequence, the property of mountebanks. Latterly, however, Flourens has taken up the subject of phrenology, and separated a great deal of the errors of Gall and his followers; and it is to be hoped that, in time, a true science will be founded. What Flourens has done for phrenology, Reichenbach and Gregory are doing for mesmerism; and here, too, we hope that, before many years, the true science of the organic fluids will begin to develope itself. But unless physiologists determine to labour inductively, and, eschewing all metaphysics, cease to give new names to unintelligible phenomena, in order to persuade themselves into a belief that they understand everything, a longer time must elapse before medicine passes from what Auguste Comte would call the theological and metaphysical stage into the positive.

It is for this reason that we have been so severe with M. Cornay's book, for we look upon all such works as obstacles to real progress, although we will do him the justice to say, that there are many excellent ideas throughout his essay, which, if put together in an intelligible form, would possess some value: as, for instance, his examination of the relation between the facial muscles and the character, whether of races or of individuals. In this part he supplies deficiencies which exist in the views of Lavater, who was not an anatomist; and he also shows, in accordance with the views of M. Flourens, that it is rather to that point we should look for the external effects of the mind upon form. In conclusion, we would express a hope, that M. Cornay, and all others intending to write upon such important subjects, would endeavour, if they could not be scientific, to be at least intelligible.

*Canstatt's Jahresbericht über die Fortschritte der gesammten Medicin in allen Ländern.* Redigirt von Dr. EISENMANN. Erlangen: Ferdinand Enke. 1850.

*Canstatt's Annual Report on the Contributions to General Medicine in all Countries.* Edited by Dr. EISENMANN.

*Handbuch der Pathologie und Therapie*, von Dr. C. A. WUNDERLICH, Professor der Medicin zu Tübingen, &c. Parts III. and IV. Stuttgart: Ebner und Seubert. 1849. 8vo. Vol. I. Die Allgemeine Pathologische Physiologie, p. 243 to p. 608.

*Wunderlich's Handbook of Pathology and Therapeutics.*

*General Pathology, as conducive to the Establishment of rational Principles for the Diagnosis and Treatment of Disease.* A Course of Lectures delivered at St. Thomas' Hospital during the Summer Session of 1850. By JOHN SIMON, F.R.S., &c. London: Renshaw. 1850. 12mo. pp. 288.

SINCE the last occasion on which we drew from the ample literary stores of the "Jahresbericht," its distinguished originator and chief editor has passed from the scene of his earthly labours; and, though his name still continues to adorn the title-page of the great periodical which he founded, the school of Erlangen has had to deplore, in the premature death of Dr. C. Canstatt, a loss which will be no less felt by all who can properly appreciate and esteem that enthusiastic zeal, untiring energy, and complete devotion to the advancement of the science and literature of medicine, which ever characterized the late talented director of the most valuable, extensive, and best-arranged system of reports on the progress of medical science in its several departments, with which we are acquainted in the whole range of professional literature, whether home or foreign. It needs, we think, no apology on our part, when we pause to pay but a passing and brief tribute to the memory of one whose early labours gave promise of a brilliant and eminently useful career; and to whom we owe the conception and execution of a project for publishing, within the compass of one annual work, and in one language, the result of the investigations prosecuted by all the medical schools of the known world, and which, widely separated though their authors often are, frequently exhibit a most remarkable amount of similarity of design, and, when collated and compared, serve, in no few in-



stances, mutually to elucidate each other. The establishment of a such a medium, whereby we can, as it were, take a bird's-eye view of the immensely extensive field which the literature of medicine now embraces, must be looked upon as a real boon to those who are conducting original research ; while it is not less valuable to the enlightened practitioner who aspires to keep himself *au courant* with the advances made in the special department of medicine to the cultivation of which he has devoted himself. To no other source can either have recourse, with such certainty of finding copious and comprehensive reports on the subjects of his favourite study, and treated by such able hands, as to the *Jahresbericht über die Fortschritte der gesammten Medicin in allen Ländern*. Here will he find, collated, compared, analyzed, and reviewed by some of the most eminent writers of Germany, all that a year's labour of many heads, in many lands, has added to the stores of our knowledge.

The volumes for 1850, which are now before us, show no falling off, notwithstanding that the sole editorship has devolved on Dr. Eisenmann, whose name was hitherto associated with that of the lamented Canstatt in conducting the periodical. The able collaborateurs, who on former occasions furnished their valuable reports from the various and distant schools of Germany, have not relaxed their exertions; and we still find the names of Vogel, Albers, Loebel, Von Siebold, Scherer, Hecker, &c., honourably representing the schools of Giessen, Bonn, Vienna, Göttingen, Würzburg, and Marburg. A mere enumeration of the several subjects treated of in the seven volumes which the "Jahresbericht" for 1850 comprises, may, perhaps, serve to direct the attention of our readers more particularly to this great work, indicate to many sources whence they may derive ample information on the state of our science, and convince all of the industry and energy with which medical literature is now conducted in Germany. Vol. I. is devoted to *Biology*, which is considered under several heads, viz., *Physiological Physics*, *Anatomy*, *Histology*, *Anthropology*, &c.; Vol. II., *General Pathology*; Vol. III., *Local Pathology* (*that of the blood, nervous system, &c*); Vol. IV., *Ætiological Pathology*, (*morphological pathology, acute, chronic, malignant disease, &c*); Vol. V., *General Therapeutics*; while Vols. VI. and VII. are devoted to subjects, which are either wholly unappreciated amongst us, or, at most, can only be considered as in a state of infancy: we allude to *Zoological pathology*, including the veterinary art, and State Medicine (we have no better translation for *Staats-arzneikunde*), embracing general hygiene, scientific investigations into the state of the public health, and

forensic medicine. Under these several heads, not only will there be found a complete bibliographical record of the several general and special works, with copious illustrative extracts, but the whole are passed in review ; and, in no few instances, the reader will meet many interesting original observations, interwoven in the form of review or commentary, from the pens of such men as Valentin, Henle, and Vogel, who are unsurpassed in their favourite subjects of special research, and whose dictum must be deservedly regarded as in no small degree authoritative.

In the third volume we are presented with a report on the pathology of the blood, by Dr. Julius Vogel, from which we purpose to make some extracts. The relative proportions and absolute quantities of the several constituents of this fluid have been the subject of repeated investigation by numerous pathological chemists, since the appearance of the work of MM. Becquerel and Rodier, the latest complete treatise ; and not a little discrepancy is to be observed in the results obtained by the several analysts, as also by the several methods employed. With a view to explain these differences, Hinterberger has undertaken some investigations, and, by the repetition of the various processes hitherto employed, has arrived at different results. Thus, with regard to *fibrin*, he has found that a considerably smaller quantity is obtained by the process of whipping, than by washing and pressure of the blood-cake (coagulum). The figures in three cases given present remarkable differences, as may be seen from the following table, the first column showing the quantity obtained by whipping, and the second that by washing and pressure :

CASE 1,	3.19	.	.	.	4.32	Difference,	1.13
„ 2,	2.35	.	.	.	2.82	„	0.47
„ 3,	0.97	.	.	.	1.04	„	0.07

The explanation offered by Hinterberger is, that by whipping, a considerable quantity of the fibrin is converted into very fine flakes which are subsequently carried off in the process of washing ; while in the second method, that of washing and pressing the coagulum, the insoluble parts of the blood-corpuscles are included, and the weight of the whole becomes thus increased. Again, with regard to albumen and the other elements of the blood, no less discrepancy exists in the results arrived at by different chemists and different processes, so high figures as 54.32 !! 32.46 !! expressing the differences in two of Hinterberger's analyses ; while those of Höfle, Scherer, Zimmerman, and Becquerel and Rodier, do not, by any means, ex-



hibit a much more satisfactory condition of this department of pathological chemistry. With regard to the next most important constituent of the blood, viz., albumen, we may take occasion here to allude to the interesting application of the polariscope to its detection and quantitative analysis by M. Becquerel.

The discovery of the molecular rotatory power of albumen, as it exists in the serum of the blood and the white of egg, is due to M. Biôt (to whom we are also indebted for a knowledge of the similar physical properties possessed by sugar), who first pointed out the deviation to the left in the rays of polarized light caused by this substance. M. Bouchardat subsequently made experiments to determine, by the same means, the amount of this deviation in the case of albuminous fluids. But, at the point where M. Becquerel has taken up the investigation, the following questions remained to be solved: Was the deviation caused by the white of egg due to the albumen which it contains, or to the sugar which has been stated to have been discovered therein? And what are the conditions under which the serum of the blood can be investigated by polarized light, as M. Bouchardat had pointed out that, in the majority of cases, it was not observable? While a not less important requirement was, the construction of an instrument sufficiently simple and portable, and which could be used with facility in the wards of an hospital. We shall see how far M. Becquerel has arrived towards completing the investigation of these important points, and furnishing us with a polariscope which will answer the purposes of pathological inquiry. Without delaying to consider that of M. Biôt or the modification of it by M. Mitscherlitz, we shall pass at once to the more convenient form of instrument imagined by M. Edmond Becquerel, the author's brother, and manufactured by M. Soleil. It will be found to be an instrument very easy of adjustment, and capable of being employed with facility; comprising the direct measurement of the rotation by the process of M. Mitscherlitz, and the use of a sufficiently intense artificial light to study the deviations in coloured fluids.

The essential parts of the apparatus consist of a polarizing and an analyzing prism, inserted into the opposite ends of a tube which varies in length from six to ten inches, according to the more or less deep colour of the liquid whose properties are to be studied. The prisms employed are constructed after the plan of Nichol, so that only a single image is found in the field of vision, which is finally transmitted to the eye, enlarged by a lens placed before the analyzer. A graduated circle, eight inches in diameter, accurately divided, and furnished with a vernier and

index, is attached to the instrument at a convenient distance from the eye-glass. The light used by M. Becquerel is that given by the *essential oil of chiste*; the lamp being enclosed in a tin case furnished with a circular aperture, in front of which is a condensing lens.

The manipulation of the *albuminometer*, which is the name given to the apparatus by our author, is sufficiently simple. Having directed the polarizer towards the source of light, and for coloured liquids placed a slip of red glass in the trajet of the luminous rays, the first step is to determine the 0 of the instrument on the circle,—which is effected by turning the index, and bringing the 0 of the vernier and that of the circle to coincide accurately, then examining the luminous ray, and revolving the analyzer until either complete extinction is effected, or the minimum of light is obtained. It would, of course, answer precisely the same purposes if the maximum of illumination was taken as the standard. This done, the analyzer is screwed home until it and the index come to form one system of parts, capable of moving together. If it be desired now to examine the rotatory power of a given liquid, a glass tube is filled with it, and placed in the apparatus. If it contains albumen, we shall now observe, on regarding the analyzer, that the luminous ray has re-appeared; and, in order to produce the extinction of it again, it will be necessary to turn the analyzer to the left. This movement is communicated to the index at the same time; and when the ray becomes invisible, or reaches the minimum, we can easily read off the exact number of degrees and seconds through which the index has passed, which is the measure of the rotation produced.

In conducting observations with the polariscope, M. Becquerel advises us to exclude all external light as much as possible, and even to remain for a little time in the dark before actually commencing to experiment; for which purpose he recommends a veil of black stuff for covering the head. These precautions may, no doubt, be necessary, if very delicate researches are being made; but, having repeatedly examined different objects by polarized light, we can venture to say that very satisfactory results can be obtained without this complete isolation of the polarized beams. Many difficulties present themselves in the examination of fluids: thus, according to our author, of ten specimens of blood-serum examined without previous preparation, eight will be found almost certainly totally unfit for the purpose, and will, in fact, not transmit any luminous rays. This is due, in the majority of cases, to the presence of blood disks, which are always present in small quantities,



and cannot be removed by simple filtration, but by the addition of a small quantity of sulphate of soda (about one grain to the 100), this impurity, as well as that caused by albuminous fragments, &c., may be arrested on the filter; and the albumen, thus purified, will not be found in the least altered in its rotatory properties. In those instances in which the serum is opalescent, or contains biliary colouring matter, we must despair of attaining any results by the polariscope.

When, therefore, a suitable specimen of serum of the blood is examined by the albuminometer, it is found that a deviation takes place, which is constant to the left side, and which varies between five and ten degrees. What is the cause of this deflection? It is not the presence of sugar, according to M. Becquerel; as, in 150 analyses made specially with a view to determine this question, he was unable to obtain a trace of this substance. It is not the extractive matter, nor the salts, seeing that they have no such action of themselves. But albumen obtained pure by the process of M. Würtz gave like results, and the amount of deviation is directly proportionate to the quantity of albumen, as estimated by chemical analysis. In fifty cases of patients affected with different diseases, this excellent analyst has examined the serum of the blood, both chemically and with the polariscope: the results have been—

1st,—That the deviations were constantly proportionate to the quantity of albumen.

2nd,—The deviations varied within the following limits:—The weakest was  $4^{\circ} 30'$ ; the strongest,  $9^{\circ} 00'$ ; the proportion of isolated pure albumen varied from 48.60gr. to 94.41gr.; the results calculated by the formula of M. Biôt<sup>a</sup>  $(a) = \frac{a}{lde}$ , gave for the molecular rotatory power, in the fifty cases of serum, the mean of  $27^{\circ} 36'$ .

From these data, the quantity of albumen indicated by each minute and degree is easily deduced.

The mean of fifty analyses of the blood serum gives as a result:—That each minute corresponds to 0.180 grains of pure albumen, and each degree corresponds to 10.800 grains.

From this a table has been constructed, showing, at a glance, the absolute quantity of albumen in any given serum whose molecular rotatory power is known. In ten cases of liquids obtained from effusions, cysts, &c., and in five of albuminous urine, examination by the polariscope was eminently satisfactory; in

<sup>a</sup>  $a$ , the intensity of deviation from red glass;  $l$ , length of tube;  $e$ , ponderable proportion of active substance in solution;  $d$ , density of solution.

the latter instance, the mean rotatory power was  $27^{\circ} 41'$ , and directly proportionate to the quantity of albumen.

We shall next proceed to consider the application of these facts which M. Becquerel has made to the study of the blood under healthy and diseased conditions:

*a. Physiological Condition.*—The mean quantity of albumen was found to be 80 per 1000; the range of variation between 75 and 85; deflections by the albuminometer, 7 to 8. These proportions may be modified by a weakened constitution, bad nourishment, &c.

*b. Pathological State.*—Under certain diseased influences, the quantity of albumen will be found either to remain within normal limits, or to undergo increase or diminution.

1. The quantity of the albumen of the blood remains within normal limits in slight affections, or those of short duration; those in which the appetite is preserved; *inflammations, at their commencement, the first or second day*; chronic maladies, in which the health is preserved.

2. It is much more difficult to distinguish those cases in which the quantity of albumen increases: they are exceptional and rare.

3. The quantity of albumen diminishes pretty often, viz., in cases of insufficient nourishment, chronic affections with impaired health, prolonged regimen, maladies in which losses are sustained by hemorrhage, dropsy, maladies of the brain, *acute inflammations prolonged*, pneumonia, &c.

The results of a very extensive series of investigations into the variations in quantity of albumen in the blood-serum in several diseases, are next detailed. The particulars cannot fail to be interesting to the chemico-pathological inquirer, especially as there is but little doubt that the paramount importance hitherto attached to *fibrine*, has, to a certain extent, diverted the attention of many observers from the part played by albumen in vital chemico-physics; and which, as we shall presently have occasion to show, there is now much reason to believe is at least, fully as much connected with healthy and diseased conditions of the blood, as any other of its constituent elements. For the details of these observations, however, we must refer those who may wish to prosecute the investigation, to the original paper of M. Becquerel; we must content ourselves at present with presenting to our readers a summary of the facts which this able inquirer has arrived at.

The following conclusions will be found to contain, in a condensed form, all that has been established with regard to deviations from the normal standard, as ascertained by the po-



lariscope, and, in a great number of cases, owing to M. Becquerel's indefatigable spirit of research, corrected by direct chemical analyses:

1. The albumen in solution in the blood-serum and in a great number of organic liquids, causes a deviation to the left in the plane of polarization of a luminous ray.

2. The intensity of this deviation is proportionate to the quantity of albumen contained in these liquids, and can be employed as a very exact measure thereof.

3. The molecular rotatory power of albumen, in liquids which have not been altered by chemical re-agents capable of changing its condition, may be estimated from numerous experiments, and from the application of the formula proposed by M. Biôt, at  $27^{\circ} 36'$ ; each minute corresponding to 0.180 grains, and each degree to 10.800 grains albumen. The approximation being, as we have said, within from four to five minutes; and consequently the source of error about  $\frac{1}{100}$ , which is much less than that by chemical analysis.

4. In the physiological state, the serum of the blood contains a quantity of albumen, which oscillates between 75 and 85 per 1000, the mean being 80. These results correspond to deviations to the left oscillating between seven and eight degrees, the mean being  $7^{\circ} 30'$ .

5. In the pathological state, the quantity of albumen oscillates within normal limits in the following diseases:—maladies of light degree or short duration; affections in which alimentation is continued; maladies of a certain gravity, at their commencement; a certain number of chronic affections in which the system continues in a satisfactory condition.

6. The quantity of albumen in the blood is *augmented sometimes, but very rarely*. These cases are exceptional, and, as far as is known at present, cannot be referred to any general principle.

7. The quantity of albumen of the blood *diminishes frequently*; thus under the following conditions:—insufficient alimentation; chronic debilitating maladies; affections in which the amount of food is restricted for a prolonged period; those in which evacuations of blood take place; losses of liquids, or dropsies; inflammations of a certain gravity, and especially pneumonia, &c., &c.

If we examine certain groups of maladies we obtain for results,

8. In simple continued fever, the albumen remains within natural limits.

9. In plethora it is sometimes normal, sometimes notably diminished in quantity.

10. In erysipelas of the face, with fever, the albumen diminishes a little.

11. In pneumonia, the quantity of albumen almost normal for the first and second days, diminishes afterwards, and finally in considerable quantities<sup>a</sup>.

12. In acute pleurisy, and bronchitis, the same modifications as in pneumonia are produced, but in a less degree.

13. In other inflammations, it is in general the intensity and gravity of the disease, the strictness of the regimen, the date from the commencement, which regulate the diminution of the albumen.

14. In pulmonary emphysema, the albumen diminishes when attacks of suffocation and dyspnoea supervene.

15. In diseases of the heart, the albumen varies but little until dropsy appears, when it undergoes diminution, and often in considerable quantity.

16. In Bright's disease, it is the production of the dropsy, and not the loss of albumen in the urine, which determines the diminution of the quantity of albumen in the blood.

17. In hemorrhage, or softening of the brain, some facts, though as yet hardly sufficient have been collected, warrant us in believing that the quantity of albumen becomes diminished.

18. The direct measure of the rotation permits us to appreciate, with great exactitude, the proportions of albumen contained in all pathological liquids.

19. In more than 150 bleedings, and fifty pathological fluids, M. Becquerel never met circumstances which have in any way modified the effects of polarization.

The question as to how far the polariscope is available for the estimation of albumen in the urine, is one of no little interest. M. Becquerel states that the quantity present must be of a certain amount to render the deviation appreciable. In the following cases, it will be observed the quantities of albumen were not very large; indeed the author thinks that it is generally much less than appears to be the case on the application of nitric acid or heat. In the instances he has quoted, he found that, by these means, the urine almost became a condensed mass. The deviations were  $0^{\circ} 32'$ ,  $0^{\circ} 20'$ ,  $0^{\circ} 32'$ ,  $0^{\circ} 17'$ , and  $0^{\circ} 25'$ , cor-

<sup>a</sup> At the date of publication M. Becquerel was engaged, with M. Rodier, in prosecuting investigations on this highly interesting and important subject.



responding to 5·76, 3·60, 5·76, 3·06, and 4·50. In examining the urine by the albuminometer, it will be necessary to filter, and use all possible precautions.

The mass of valuable information placed at our disposal by Dr. Becquerel's investigations, must, unquestionably, be regarded as a most important contribution to scientific pathology, and should prove a stimulus to other observers to take up this interesting field of research.

Within late years more than one pathologist of note has advanced arguments which would tend to modify our views of the comparative physiological, as well as pathological importance of the two most highly organized elements of the blood, viz., albumen and fibrine; and we find, in perusing his work, that Mr. Simon has become an advocate of the opinions of Zimmerman, who considers that the claims of fibrine to be ranked as the highest condition which the nutritive elements can assume before being actually submitted to morphic laws, and undergoing transformation into special tissue, are by no means as well founded as has been generally admitted. In the opinion of this observer, the source of this element is to be sought for either in the decay of the blood itself, or in the waste of the tissues. Data furnished by previous investigators, and which must be looked on as unimpeachable, inasmuch as they were arrived at by advocates of the opposite opinion, would seem certainly to lend considerable weight to the more recently proposed theory. Thus, for instance, MM. Andral and Gavarret have stated, as the result of their investigations, that those conditions which appear to favour the increase of the blood-corpuscles tend to diminish the quantity of fibrine, as improvement in the breed of animals. Again, fibrine is undiminished by bleeding: Andral has found it to amount to 10·00 at a fourth bleeding; Scherer, as high as 12·7 at a third venesection in a case of pneumonia; and in Dr. Franz Simon's investigations into the blood of diseased horses, many of them half-starved, he obtained 11 to 12 per 1000, 4 being the average. We know further that the blood of the foetus contains little fibrine, the egg none, the chyme none, while there is less in the blood of the carnivora than in that of the herbivora. These arguments, which are judiciously brought together, and ably urged by Mr. Simon, warrant us, in his opinion, in regarding this constituent of the blood as an excrementitious product, derived from the waste of the tissues, and in process of elimination from the system; and "that in acute inflammatory diseases a super-fibrination of the blood is to be looked on as a consequence of these diseases, not as their cause, and not as a primary affection." The results arrived at by so

many different pathologists of eminence cannot fail to produce in all candid minds considerable doubts of the correctness of the older doctrines with regard to the all-important office awarded to fibrine; but further observations are still wanted, especially as to the constitution of and part played by the exudation plasma, blastema, or coagulable lymph, in the inflammatory process, before we finally assign to it the low position of an excrementitious product. Comparing M. Becquerel's results with those of Andral, as regards pneumonia, perhaps we may say that this latter view receives confirmation: thus it would not be unreasonable to suppose that, if albumen be the highest and most readily assimilable element, it should undergo diminution in quantity, owing to the increased disintegration and molecular waste of tissue which, in accordance with the views of Zimmerman, would be estimated by the increase in the quantity of fibrine, a fact ascertained beyond all doubt, whatever be the interpretation put upon it.

As one of the most important results of the increase of fibrine in the blood in inflammatory conditions, Mr. Simon considers its tendency to accumulate and be deposited in certain situations within the vascular system; and here again, whether deservedly or not, we find views are beginning to gain ground which differ widely from those that have hitherto reigned undisputed. Our author "believes, from a variety of reasons, that it is almost certain the lining membrane of the vascular system is nourished directly from the circulating fluid with which it is in contact;" and, further, "that its morbid changes depend, not on any inflammatory condition of the *vasa vasorum*, but on those humoral changes, those varieties in the qualities of the blood, by which it is more immediately and certainly affected than any tissue in the body." He thus thinks that we have *primâ facie* evidence that endocardial deposits cannot be of inflammatory origin, and, with some show of reason, asks "Why, if inflammatory, should they evince so decided a preference for the *left* side of the heart?" "We know," he says, "that pericarditis pays no respect to the grooves and septum of the heart." The explanation offered is, that fibrinous deposits take place from the overcharged solution (the blood), the valves encrusting themselves with fibrine, just as a stick in certain streams coats itself with a calcareous envelope; their more frequent presence on the left side of the heart being accounted for by reference to the peculiarities of its contents, the new-made arterial blood. The following extracts and observations are worthy of attention:



“I have carried a single thread, by means of a very fine needle, transversely through the artery and vein of a dog, leaving it there so that it might cut the stream ; and I have done this repeatedly, sometimes in the femoral vessels, sometimes with the carotid and jugular, sometimes with the aorta and cava. I have suffered the thread to remain during a period of from twelve to twenty-four hours. My experiments have given me as a uniform result, that the arterial blood with the utmost readiness deposits its fibrin on the thread ; the venous blood with the utmost reluctance. And in most of my experiments, the thread, where it traversed the canal of the artery, presented a very considerable vegetation on its surface (exactly like those we are talking of on the valves of the heart); a vegetation sometimes as large as a grain of wheat; always of a pyramidal shape, with its apex down-stream, and its base attached to the thread. In the artery, one might say that the thread whipped the blood, just as one whips blood in a basin to get the fibrin out of it; but with this trifling difference, that, instead of the rod beating the fluid, the fluid ran over the rod and precipitated its fibrin there. In the vein, the thread seemed to operate no way but obstructively; never coating itself with fibrin, but sometimes delaying or stopping the circulation with a voluminous black clot, chiefly collected on that side of the thread remotest from the heart. Accordingly, the general statement and rationale of the matter appear to be as follows: the disease in which these deposits are so frequent is one of intense overfibrination of the blood, and one in which almost certainly there are other conditions, besides *quantity*, making the fibrin easy of precipitation; the left side of the heart has preference, because it is the arterial side, and because arterial blood, as we have seen, readily parts with its fibrin; the valves, and particularly their streamward surfaces, are chosen for the deposit, because their position exposes them chiefly to the friction of the current; so that the whole curious selection of site for the deposit resolves itself into the concurrence of two conditions, which are fulfilled in that one spot of the vascular system, namely, the greatest chemical tendency to the deposition of fibrin, with the greatest mechanical facilities for its entanglement.”

“Many people bleed locally, or even generally, when they hear an endocardial murmur arising in the course of rheumatic fever. In their eyes, the new disease is endocarditis; and everything ending in *-itis* is thought, in at least a majority of instances, to be benefited by bleeding. Therefore, gentlemen, do not be in a hurry to call it endocarditis; and, as for bleeding, all that I would venture to say (for of course the treatment of this physician’s disease does not fall within my province) is, to assure you of the pathological fact, that you may bleed a patient to death without altering (except probably to increase) the proportion of fibrin in his blood.”

These experiments and observations will, no doubt, be regarded as highly ingenious and interesting, but in our mind they are by no means to be considered as warranting the con-

clusions drawn from them by our author, as to the nature of endocardial deposits. In the first place, it is but very little consistent with the present position of histological knowledge, to believe that a tissue such as the lining membrane of the vascular system, into which vessels cannot be traced, must be developed by direct attraction of nutrient matter from the circulating current which bathes it. The *epithelial* surface of this serous membrane is precisely of the same origin as that of all the lining membranes of the great serous cavities, and is consequently developed by cells thrown up in successive layers to its free surface from the basement structure. And as these membranes manifest, under the inflammatory process, phenomena exactly similar to those of endocarditis or aortitis, and exhibit coatings of lymph and false membrane, there is no reason, in the case of the endocardium, to have recourse to an explanation which would not admit of the remotest application to membranes perfectly analogous in histological relations, as well normal as pathological. We freely confess that a difficulty, and one of no small degree, exists with regard to the solution of the question propounded by Mr. Simon, viz., why should such a predilection for one side of the heart, more than the other, be shown by the inflammatory process? As far as we are aware, no sufficiently satisfactory answer has yet been elicited, which would embrace in its explanation the more frequent occurrence of lesion in the arterial than in the pulmonic portion of the circulatory apparatus, as relates to both the cavities of the heart itself, and the vessels springing therefrom. But though this, as well as other departments of ætiology, present problems, the solution of which has not yet been arrived at, it is much more becoming the scientific pathologist to candidly admit the difficulties than to adopt untenable theories<sup>a</sup>.

Amongst the other topics treated by Mr. Simon in the section devoted to the consideration of the blood in disease, are those of poisoning of this fluid by matters introduced from without, and contamination by products evolved under certain conditions, within the system itself; by the action of the latter on the circulating current, our author, in common with many other pathologists, would explain the so-called *metastasis of pus*, and the *propagation of cancer* or its secondary deposit in situations anatomically distant from the site of the original lesion. To those acquainted with the structure of the capillary vessels, as revealed by the aid of the microscope, it is almost needless to

<sup>a</sup> That the greater tendency to disease in the left than in the right side of the heart is much over-rated, has been very decidedly asserted by Dr. Todd, of London, in the fifth volume of our present series, page 1.



point out the very great looseness of language, and careless, as well as erroneous forms of expression, still in use by many, whose works are looked up to as standard authorities in various departments of medicine. Thus, we hear of *exhalation* of blood from the capillaries, absorption of pus and cancer-cells, &c.; terms which, to say the least, involve histological absurdities, as we have the most demonstrative evidence to prove that no apertures exist in the walls of the capillaries, which would allow of the passing out of the blood on the one hand, or, on the other, the entrance of a body even very much less in diameter than the pus-cell or the cancer-cell. It is established beyond possibility of doubt, that the only elements of the blood which, *without rupture of the capillary walls*, can pass from this fluid, are those which are in a perfectly fluid homogeneous condition, and which together constitute the plasma or liquor sanguinis; and that in all cases where the red or white corpuscles are found in the intravascular spaces, or on the surface of mucous membranes, or elsewhere, an actual solution of continuity of some minute vessel has taken place.

In addition, it is equally well known that, though an absorbent power be possessed by the capillaries, they cannot take up any element, normal or pathological, which presents distinct morphic properties; and that, consequently, it is only the fluid portions of tissues that can enter the current of the blood. It is time that all who enter the field of scientific medical literature should be possessed of this most requisite portion of elementary knowledge. We do not, however, wish it to be understood that these strictures are applicable to Mr. Simon. Though such errors are not to be found in his work, we thought the occasion a fitting one to introduce a few remarks; as we could point to some well-known authors, whose dicta are very widely received, who have fallen into these egregious errors.

The explanation of these questions of the propagation of pus and cancer, offered by Mr. Simon, we do not think by any means satisfactory. Abundant proof will be found in this, as well as other sections of his book, to show that he considers cancer as an essentially systemic or general disease; and yet, to account for the transmission of cancer germs and the secondary appearance of the disease in parts remote from the seat of its original deposit, he has recourse to the explanation, that, by rupture of a vein or capillary vessel in contact with the tumour, some of the cells are shed into the blood stream, and thus conveyed in its current until they again meet with a capillary network, where, owing to their greater size when compared with that of those minute vessels, they are arrested, become impacted, and give rise to a

coagulation of blood, or even rupture of the capillaries, and consequent extravasation into the parenchyma of the surrounding organ; where they now originate a process of development, which terminates in the formation of a product similar to that from which the cells were originally derived. This explanation is applied to the case of secondary purulent deposits also. It is needless to inform our readers that the development of this theory is not due to the author<sup>a</sup>: it has received the sanction of Langenbeck, Hasse, and others of the German school; in fact, it is to the experiments of the first-named observer we must look for anything like confirmation of these views. With the object of determining the manner of the production of these secondary cancerous formations, Langenbeck injected the fluid matter of a recently removed cancerous growth into the veins of a dog; the animal was subsequently attacked with dyspnoea, and on being killed, cancerous masses were found in the lungs. Thus, then, it is attempted to explain the occurrence of secondary formations in particular organs, by the entrance of matter from the primary seat of disease into the capillaries in its neighbourhood, which is carried by the veins to the next capillary plexus: a portion of matter entering a radicle of the systemic veins thus determining deposit in the lung, while, if it enter a tributary of the vena porta, the secondary affection will be found in the liver.

That such a coincidence takes place in very numerous instances, cannot be denied; but several objections may be raised against the adoption of this explanation for all cases. Thus Langenbeck's experiment, performed in the hands of Vogel, completely failed. Again, we cannot allow that the rupture of a capillary would be necessarily, or even with any degree of likelihood, followed by the *entrance* of any matter; its own contractility called immediately into play, as well as the coagulation of the effused blood, would rather have the effect of blocking up the orifice and preventing the ingress of any extraneous matter. In reference to this question, Vogel says: "Independently of any laceration of the vessels, the *fluid* portion of the ichorous discharge may enter the blood by endosmosis, and induce changes in it in a manner not at present understood." A similar remark may be made with re-

<sup>a</sup> There is one feature in the entire work which we think not only detracts from its value, but is also a most injudicious omission; we allude to the scanty list of references. On the whole, the author will be found to have given a tolerably fair and complete account of the present state of pathological science, but in only a very few instances has he told the reader whence peculiar opinions were derived.



gard to pus ; and indeed a brief consideration will show that the pathological nîsus, which in any given case of cancerous diathesis determines deposit in any one particular locality, must surely be allowed to be competent to produce similar results in other tissues, textures, and organs. Again, it may be urged that the cancer-cell must be looked on as the final result of the series of actions brought into play in this kind of growth ; and it remains to be shown whether it is capable of setting a new order of operations in action. It is in the blastema, undoubtedly, that inexplicable power of determining particular kinds of cell-growth resides ; and as it can pass from the capillary walls at all points with equal facility, any explanation of the manner of formation of secondary deposits must embrace the consideration of that local attractive power which is undoubtedly evinced by the particular tissue which is to become the seat of heterogeneous deposits.

Amongst the diseased conditions of the blood which have lately attracted much interest, is that of an increase in the quantity of one of its corpuscular elements. In the year 1845, Bennett and Virchow were first directed to the study of this affection by cases which fell under their notice almost simultaneously ; the former observer having, in March of that year, examined the body of a man whose case was subsequently published under the title, “ Hypertrophy of Spleen and Liver, in which Death took place from Suppuration of the Blood.” Virchow more early recognised the true nature of the disease, though his case did not occur till August, 1845 ; but he then described it under the term “ Leukhemia,” for which Bennett now proposes to substitute that of “ Leucocythemia” (λευκος, white, κυτος, cell, αίμα, blood), a name which, as he says, accurately expresses a pathological fact, and involves no theory. In two laborious articles in the January and April Numbers of the Edinburgh Monthly Journal for the current year, Bennett has collected all the cases hitherto observed, viz., those by Virchow, by Quain and Parkes of London, by Heslop of Birmingham, and by several other British and foreign pathologists, including himself.

The essential phenomenon of the disease appears to consist in the superabundant development of the white corpuscles of the blood ; a condition which, in a large number of instances, has been observed to be accompanied by enlargement of the spleen and liver, and in others by increased size of the lymphatic glands. In numerous instances the affection would appear to admit of easy recognition during life, by the examination of a

small drop of blood taken from the patient's finger with the point of a needle, and placed in the field of the microscope, when the number and size of the colourless corpuscles will be readily seen to exceed the normal standard. We can hardly state that the precise pathological relations of this condition of the blood and the affections of the glandular system, have been yet fully worked out. In very many cases a tendency to hemorrhage, in the form of hemoptysis, bleeding from the gums, with purpuric spots and diarrhœa, has been noticed. We anxiously await the publication of the third part of Professor Bennett's paper, and we certainly indulge hopes that this will be found to be another of the cases in which the microscope lends invaluable aid to the formation of accurate diagnosis during life, at the same time that the indications which it furnishes for an enlightened system of therapeutics are not less important.

To those anxious to prosecute the subject of the pathological condition of the blood, and to follow out the varied observations which have been recently made on its several states in disease, we would beg to indicate the reports in Canstatt's *Jahresbericht*, as a source whence they may depend on deriving the most abundant and satisfactory information. Our present limits preclude us from entering on a more extended consideration of this highly interesting and important topic, one, likewise, which, though it has been long regarded as belonging to the domain of abstract science, we are beginning daily to see the practical application of more and more. To all who believe in the progress and gradual evolution of medicine in common with other departments of science, it would be hardly necessary to point out how much injury professional knowledge sustains in its onward move by the constant rigid application of an unworthy spirit of *cui-bonoism*. It is time that the unfounded distinctions between the *practical* and the *scientific* man should cease: there is no ground for such distinction. The practitioner best suited to undertake the treatment of disease is he who brings to his aid all that the advance of his science furnishes him with, whether in general principles of diagnosis, or improved therapeutics. It is to pathology especially, and to the patient and diligent practice of *all* the methods of research of which we are now in possession, that we must look for immediate and important advances in scientific medicine. This department has in itself become so extensive, that in the more eminent schools and hospitals it is now cultivated by special observers. The field is so large that in the system of the division of labour, the chemist and the



microscopist find each ample scope for his abilities and exertions. But for practical purposes, and the due conveyance of instruction in the elements of this important department of medical science, the establishment of one chair at least has been deemed requisite in most of the schools of Europe, while, in several instances, an addition has been made to the medical staff of hospitals intended for educational purposes; and in the appointment of a distinct officer, to take charge of the pathological department, and undertake its teaching, will be found the recognition of a practical necessity. Indeed, when we consider the absorbing duties of the clinical teacher, we at once see how utterly impossible it is for him to conduct morbid anatomical examinations, or chemical and microscopical investigations, with sufficient care and accuracy. We might adduce the example of the Royal Infirmary of Edinburgh, and show from its working, and the highly valuable contributions to pathology which have been made by the present pathologist and his predecessor, what might be anticipated from an extended system of such investigations by separate observers attached to all our metropolitan hospitals. In Ireland we have as yet no chair of general or special pathology: we have produced as yet no special cultivators of this department of science: none of our hospitals possesses a pathologist!!

At present we can do no more than allude to the *Handbook of Pathology*, by Professor Wunderlich: it will be found to contain a faithful representation of the present condition of the science; the elementary portions of the work, devoted to a consideration of the physical and chemical laws which are brought into operation in the various processes of disease, are in particular well worthy of perusal. We shall, however, return at a future time to a more extended consideration of the subject of general and special pathology.

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*God in Disease; or, the Manifestation of Design in Morbid Phenomena.* By JAMES F. DUNCAN, M.D. London: Nisbett. 1851. Foolseap 8vo., pp. 224.

THE study of medicine has, by superficial thinkers, been very frequently stigmatized as tending to infidelity; yet by far the greater number of those books which have been written with the view of proving the existence of an Almighty power from his works, are the production of members of our profession. A very manifest illustration of design, hitherto strangely over-

looked, has been happily chosen by Dr. Duncan for explanation; and we have been much gratified at the appearance of such a volume from the Dublin school. Though at first rather prejudiced against this book from its title, the first part of which we cannot help regarding as scarcely sufficiently reverential, we received both instruction and pleasure from a perusal of its contents. The subject is well worked out, and truthfully illustrated by practical facts, which are laid before the reader in a simple and unaffected style, which cannot be too much admired in the popular work of a professional author. As our limited space does not permit us either to analyze the book, or to extract any portion of its contents, we must content ourselves with stating, that its publication reflects honour on both the head and the heart of the author.

*Om Höftleden och Ledbrocken uti anatomiskt, pathologiskt och chirurgiskt hänseende, jemte en kritisk Öfversigt öfver några bland Inflammations-lärans viktigaste Punkter. Afhandling af CARL SANTESSON, M.D., Chirurgiæ Magister, Prosector vid Carolinska Med. Chirurgiska Institutet. (Med sex Plancher.) Stockholm: Norstedt & Söner. 1849. 8vo., pp. 272.*

*A Treatise on the Hip-joint and Articular Cartilages, with reference to their anatomical, pathological, and surgical Relations, together with a Critical Review of some of the most important Points of the Theory of Inflammation. By CHARLES SANTESSON, M.D., Master of Surgery, Demonstrator of Anatomy at the Royal Carolinean Medico-Chirurgical Institution of Stockholm<sup>a</sup>.*

IN reviewing Dr. Santesson's work on diseases of the hip-joint, in our last Number, we stated our intention of returning to the consideration of the volume; and the importance of the subject induces us thus soon to redeem this promise, by presenting our readers with the greater part of his chapter on excision of the head of the femur, or, as he terms it, "resection in the hip-joint." He appears to us to give a good summary of the history of the operation, as an heroic means of treating advanced cases of morbus coxæ; and we shall, therefore, without further preface, proceed to give a full translation of the more important portions of it:

<sup>a</sup> For the translations from the Swedish in this review we are indebted to our friend and contributor Dr. W. D. Moore.



“It was not, properly speaking, until the last century that the hip-joint acquired some interest for operative surgery. The great proportion which the lower extremity bears to the entire body, the deep situation of the articulation itself, and the thick mass of soft parts which surround it, together with its close and important vascular and nervous connexion with the viscera of the abdomen, caused surgeons long to shrink from venturing on an operation in this joint. The urgent necessity for relief, on the one hand, and the enterprising character of modern surgery on the other, have, however, on this, as on so many other occasions, overleaped the ancient boundaries, and enlarged the limits of human art. Wöhler and Puthod, in 1739, according to Morand and Velpeau, first proposed to exarticulate the hip-joint in severe injuries, or in gangrene which should extend above the upper boundary of the middle third of the thigh. The opinions of the profession were long divided, as to how far so unprecedented an interference could, with any prospect of success, be practicable or prudent in the human subject; experiment had long before proved its possibility in the lower animals; many years, however, elapsed ere the operation was practised on the human subject. By degrees experience showed, not only the feasibility, but also the successful issue of this operation; so that, under the head of “exarticulation of the hip-joint,” we now find a chapter in all the modern manuals of surgery; and, although the indications for adopting it are as yet imperfectly settled, ample directions are laid down for its performance.

“Charles White, many years after the proposal of Wöhler and Puthod, conceived the idea of excising the upper end of the femur in caries of its head and adjoining portion; and in 1826, Barton and Rogers, two American surgeons, suggested, and in two cases of ankylosis of the hip-joint adopted the plan of sawing through the neck of the femur, immediately within the trochanter major; and this operation had, according to them, as its result in one of these cases, the formation of a new articulation. There are thus three operations which have hitherto been undertaken in this region, and which, consequently, deserve the attention of the operating surgeon, viz.:—

Exarticulation, with removal of the entire extremity;

Excision of the upper end of the femur; and

The formation of a false joint in cases of ankylosis.”

The author proceeds next to describe what he considers the most important points connected with excision of the upper end of the femur, its indications, and the methods of performing it, commencing with the history of the operation:—

*History.*—As I have already stated, Charles White, of Manchester, was the first who, in his ‘Cases in Surgery,’ published in 1770, proposed the same operation for the hip-joint, which he had in the preceding year performed with success in the scapulo-humeral articulation, viz., excision of the head of the bone for caries. He himself, however, never performed the operation on the head of the femur, and the proposal appears to have long remained forgotten, for the first operation of this kind known with certainty to have been accomplished was undertaken nearly half a century later, and by a different person, although of the same surname, which latter circumstance has occasioned the two to be confounded. It was Anthony White, Surgeon to the Westminster Hospital, in London, who, in the year 1818, first performed it. The patient was a young boy with luxation of the head of the bone [ledhufvudhet], in consequence of morbus coxæ. It lay on the outside of the os innominatum, surrounded by a number of fistulous openings and sinuses, through which the caries *could easily be detected by examination with a probe*. The disease had lasted three years, and the patient’s strength was rapidly declining. With the concurrence of Mr. Travers, Mr. A. White undertook the excision of the diseased portion of the femur. The bone was sawn off immediately below the lesser trochanter, after which the femur, which had been fixed in a state of strong flexion and adduction, without difficulty allowed a straight direction to be given to it, which was maintained during the process of healing by means of suitable extending apparatus [extensions förband]. The operation was perfectly successful. After a year the patient was able, with the assistance of a stick and a high-heeled boot on the side which had been operated on, to walk without difficulty. A new articulation had formed, by means of which he could accomplish all the ordinary motions of the femur. Five years afterwards the patient died of phthisis. The instructive preparation of the newly formed articulation between the pelvis [höftbenet] and the upper portion of the shaft of the femur, is to be found in the pathological section of the Hunterian Museum, in London, No. 391.”

We find, by referring to the Catalogue, that both the os innominatum and the remains of the femur were slender, small, and light. The upper part of the shaft of the femur was placed opposite to the posterior part of the acetabulum, to which, as well as the adjacent part of the ilium, it was firmly, but moveably, attached by dense ligamentous tissue. Connected with the same tissue and with the upper part of the shaft was a portion of muscle enclosed by and mingled with areolar tissue.



“ Dr. Schmalz, of Dresden, is reported, so early as 1816, to have removed with success the head of a femur attacked with caries. But as the account of the disease and of the operation particularly states that the operator in this case had nothing to do but to take away the head of the bone, already enucleated and completely separated by disease from the neck, through an incision, this case can scarcely be referred to the catalogue of excisions, however remarkable it may be in other respects.”

Such cases as this, where nature has completely eliminated the necrosed head of the femur in advanced stages of the disease, have not been unprecedented. For example, in Todd's *Cyclopedia of Anatomy*, art. “ Hip-joint,” we have the following observations by Dr. Adams: “ The writer has known two examples of the head of the femur thus separated at their epiphyses from the neck of the bones. One of these was presented to him by Mr. Shaw and is preserved in the Richmond School Museum, the other was shown by Dr. Carlisle, the present Professor of Anatomy in the Queen's College, Belfast, to the Pathological Society of Dublin. Both these patients recovered with the usual deformity.”

“ Notwithstanding the success which attended White's operation, he seems to have never afterwards undertaken it; although his connexion with a large hospital must, doubtless, one would suppose, in the course of years have afforded him fit subjects. After a case, in which Mr. Hewson, of Dublin, performed excision of the head of the femur for caries, but which turned out unfortunately in this respect, that the acetabulum was ulcerated through, and abscesses had previously formed within the pelvis, this operation seems to have entirely fallen into oblivion in England. At least in the journals and periodicals I have had an opportunity of examining, no case of this kind is related, until the successful one by Fergusson in 1845, which again brought the question and the operation, so to speak, to new life. Meanwhile, however, it had been performed by several surgeons, both in Germany and France, with varying success, not only for caries of the joint, but also in cases of complicated and comminuted fractures extending into the hip-joint from gunshot wounds, as well as in cases of necrosis, &c. Textor, of Wurzburg, who of all living surgeons has probably had the most extensive experience in respect to operations specially concerning the lower extremity, has himself performed as many excisions of the head of the femur as all the other surgeons of Germany taken together.

“ *Statistics*.—Chelius, in his *Surgery*, gives seven cases of excision of the head of the femur, only one of which was suc-

cessful. A lecture on this subject, by Roux, is to be found in the *Gazette des Hôpitaux* for March, 1847: in it he has collected twelve cases. In the following year Mr. Henry Smith published, in the *Lancet*, a catalogue containing sixteen cases, of which number half were attended with the desired result. I have since that time watched every new case as it occurred, and they were all in London, and I have thus collected up, to the present time, twenty cases, of which the following is a table:

	Number of Cases.	Successful.	Fatal.
BRITISH ISLES.—Anthony White, .	1	1	0
Hewson, . . .	1	0	1
Benjamin Brodie, .	1	0	1
Carmichael, . .	1	0	1
Fergusson, . . .	2	2	0
Simon, . . . .	1	0	1
French, . . . .	1	1	0
Haynes Walton, .	1	1	0
Henry Smith, .	1	1	0
GERMANY.—Textor, . . . .	4	1	3
Oppenheim, . .	1	0	1
Schlitching, . .	1	1	0
Heim, . . . .	1	1	0
Vogel, . . . .	1	1	0
FRANCE.—Seutin, . . . .	1	0	1
Roux, . . . .	1	0	1
Total, . .	20	10	10

“ Of these twenty excisions, fifteen were performed for coxarthrocace, or morbus coxæ; two for comminuted fractures after gun-shot wounds; one for necrosis after an old fracture; one for caries in the trochanter major and neck of the femur; and finally, one for medullary carcinoma in the upper part of the femur<sup>a</sup>.

“ *Indications.*—All the cases in which the desired result has been obtained belong to those where the operation has been performed for caries in the head of the bone, or the parts immediately adjoining the head. All the other cases have ended unfavourably. Accordingly, it is only with reference to the former class of cases that I shall here consider excision of the head of the femur, and I shall thus exclude every case con-

<sup>a</sup> Here the author supposes this case of Mr. Carmichael to have been one of resection of the head of the femur, whereas it was really one of amputation of the hip-joint.



nected with compound or comminuted fracture of the upper end of the femur after gun-shot wounds or any other injury.

“Undoubtedly the best founded, and at the same time most general objection which has been made to the adoption of this operation, is the difficulty of determining beforehand, whether the disease is confined to the femur, or whether it has extended to the acetabulum and pelvis. In the latter case all, even the most zealous advocates of excision, deprecate, for obvious reasons, the adoption of this hazardous operation. And yet some cases have shown that the ulceration may even have attacked the acetabulum and at the same time be confined to its edges or cartilages, so that the diseased portion might be removed with a gouge, and healing and complete cure take place, just as if this part had been entirely sound<sup>a</sup>. But how can this be decided beforehand? That a judgment should be grounded on the most accurate local examination with reference to this point is of the most vital importance. The best rule which can be adopted under these circumstances is, not to undertake the operation except in cases where, after the employment of all available modes of investigation, we have ascertained that the disease is confined to the femur; on the contrary, every symptom which decidedly shows that the morbid process has extended to and within the acetabulum and its immediate neighbourhood, ought to be regarded as an absolute contra-indication to the operation. The neglect of important considerations, such as these, has permitted the adoption of excision in many cases in which it never should have been ventured on; and thus has the operation been brought into disrepute with many, because the proportion of deaths consequently appeared much greater than would have occurred had a more careful diagnosis been made and acted upon. Extreme prudence and a practised judgment are, therefore, necessary to decide what cases will justify so serious an interference.

“The surgeon should bear in mind that it is not every case of caries of the hip-joint, which resists all possible non-operative remedies, and is therefore considered incurable, that is fit for excision. It appears, rather, that an impartial judgment on the experience hitherto obtained, must decide that the cases suitable for operation are the fewest in number; for it is only under certain distinct circumstances that excision of the head of the

<sup>a</sup> “Sir Benjamin Brodie remarks, that all that can be accomplished by the performance of such an operation of excision of the diseased head of the bone is, ‘the removal of *one* portion of the disease, and that it is the larger portion of it in the bone of the pelvis which is necessarily allowed to remain.’—*Brodie on Diseases of the Joints*, p. 142. London, 1850.”

femur can, with a reasonable prospect of success, be undertaken. These are: *that the disease shall be in its last stage; that displacement of the head out of its articulating cavity shall have taken place; and lastly, that the surgeon, by examination with a probe, or, still better, with the finger, through the fistulous openings and sinuses which, in the majority of such cases, are to be found around the diseased parts, shall have as accurately as possible ascertained that the disease is principally confined to the upper extremity of the femur, and that it has not spread more deeply, so as to implicate the acetabulum and pelvis.*

*“ Possibility of Mistake as to the spontaneous Luxation of the Head of the Bone.*—The symptoms which characterize the last stage of morbus coxæ are so well known, that they need not be here enumerated. It is necessary to observe, that we should not be too hasty in making the diagnosis of a spontaneous luxation, for there are cases which, on first view, present a very great resemblance to spontaneous luxation, and in which, at the same time, no real dislocation exists. The decided shortening of the limb, the trochanter major strongly drawn up and projecting, together with the other appearances of the affected hip, might easily lead to the presumption that a luxation had occurred, particularly where the disease has lasted long. And yet, notwithstanding all these symptoms, the head of the bone may still remain in the acetabulum, either perfectly sound, when the disease is confined to the neck and trochanter, or in a state of partial ankylosis. The following case, which I had myself an opportunity of observing, in the beginning of the spring of 1848, at King’s College Hospital in London, may be adduced in illustration of this point. In one of Mr. Fergusson’s wards, there lay for some months a woman, of about twenty years of age, who had for sixteen years laboured under symptoms of caries of the hip-joint. Her condition showed the existence of a disease incurable by ordinary means, and, moreover, that it was confined to the upper extremity of the femur. An abscess had formed immediately beneath and behind the trochanter major, which was opened, and through which a probe could be passed, along the above-mentioned tuberosity and the head of the femur, to the joint. The entire aspect of the hip induced Mr. Fergusson to imagine that dislocation of the head of the bone had already occurred, and he therefore determined to perform excision of it and the diseased part of the bone. It was not until he had, by means of an incision along the outside of the trochanter, and another at right angles with it at its lower end, reached the bone, and separated the soft parts from the anterior and posterior edge of the neck, so that the joint



became accessible, that he discovered his mistake as to the supposed luxation of the head; for not only did this not exist, but the head of the bone was, on the contrary, firmly ankylosed in the acetabulum. Finding, on closer examination, the trochanter major and the immediately adjoining part of the neck carious, he determined to excise the diseased part. He now sawed through the neck of the femur so far in that the incision reached the sound substance, and then in like manner divided the shaft of the femur at the base of the trochanter major, and afterwards removed the intermediate piece thus set free. On the superior and posterior edge of the neck, a round hole was found, through which a necrosed almost separated piece of bone was discovered, which was taken out. In place of an excision of the head of the femur, which had been the original intention, the operation thus became an excision of the neck and trochanter, and so strictly taken belongs, not to the subject under consideration, but rather to the proceeding proposed by the before-mentioned American surgeons in ankylosis of the hip. In 1847, Maisonneuve had, at the Bicêtre at Paris, a successful case in which he sawed through the neck for complete ankylosis of the joint.

“The occasional difficulty of diagnosis on this point, of which I have given an example above, cannot, however, hereafter mislead any one who makes it a rule never to undertake the operation except in cases where it is evident, both on inspection and to the sense of touch, that the head of the bone is out of its socket and carious. Where the disease has lasted a long time in such a state, fistulous sinuses and abscesses always form in the immediate vicinity. Through these we can generally, with the finger or a probe, feel the displaced head, and approximately estimate the degree and extent of the disease. To investigate this point it may be necessary to open an abscess formed over or around the articulation, and in this way we sometimes find the head of the bone lying in the middle of the abscess on the os innominatum, so that the finger can easily be passed round it. It is in general much more difficult to decide whether the pelvic portion of the hip-joint and the parts immediately surrounding it are sound, or to what degree it is engaged in the morbid process, and there is perhaps no sign which can give perfect certainty on this point. Where, however, the destruction has attained a more considerable extent, abscesses and fistulous sinuses in most cases form above or around the diseased parts, and by examination through them we can obtain a tolerably sure guide for our judgment of the case.

“If a chronic abscess is found in the groin, it may depend

on a psoitis or an inflammation of the iliacus internus, which may arise at a later period as a consequence of caries of the hip-joint; consequently this also ought to be regarded as a decided contra-indication to the performance of the excision.

“*Inference.*—Where, then, in this manner the dislocation of the head of the femur is ascertained with certainty, and that after examination, either by means of a probe introduced through fistulous sinuses leading to the focus of the disease, or of the finger in an opened abscess close to the joint, the head of the bone is found to a great extent either deeply carious (the acetabulum and pelvis being at the same time in a healthy condition), or only in a less degree morbidly altered, and that besides there are no fistulous communications with the acetabulum or cavity of the pelvis, nor any chronic abscess present,—where, under such circumstances, the patient’s strength is visibly and progressively diminishing, and all prospect of the possibility of a natural cure or of effecting a cure by the assistance of non-operative measures has vanished, in such a case the surgeon not only may consider himself justified, but ought also to feel himself called upon to undertake the excision of the diseased portion of the femur, an operation which, however serious it certainly is, is by no means so formidable and dangerous, as is generally imagined. If it be the surgeon’s duty to make an effort to save life, where it is evidently at stake, and still more where (without his assistance) its loss is inevitable, it must also be his duty, under such circumstances as those above described, to offer the patient the prospect of rescue which may yet remain in an operation, and not to leave him a sacrifice to death, without having tried all the means which art has in her power to employ.

“*Performance of the Operation.*—I now pass to the description of the different modes of performing the excision. He who has not beforehand closely attended to, and made himself well acquainted with this subject, will doubtless, on first thoughts, consider the operation equally dangerous for the patient to undergo, and disagreeable and difficult for the operator to perform. Such was in fact the feeling with which, in the month of November, 1847, I entered the operation theatre in King’s College Hospital, to see Mr. Fergusson perform an excision of the head of the femur, in a boy of eight years of age. I found, however, after I had twice seen it performed on the living subject, and after I had more closely considered the altered anatomical relations in which such an operation is undertaken, that it is neither so dangerous nor so dreadful. For, although resolution and caution are equally necessary to him who undertakes



its accomplishment, there is nothing in the nature or extent of the operation itself, calculated to throw any serious difficulty in the way of its accomplishment, under such indications as have been already enumerated, and when the surgeon goes to work with calm consideration, and an accurate anatomical acquaintance with the region in which he has to operate."

Having given directions as to the mode of practising the operation on the dead subject,—and in such subjects, with sound hip-joints, it is much more difficult than in the living, where the ligaments are already in great part destroyed, and the corroded head of the bone is displaced,—the author proceeds to describe the methods of performing excision on the living subject.

"The most ancient and simplest mode of performing the operation in question on the living subject, and which was also adopted by Anthony White, is by making an incision along the outside of the trochanter major, beginning one or two inches above this projection, and extending about three inches below it. The exact length of this must, however, be determined by the circumstances of the particular case, and the size of the part to be taken away. When, according to the indications for the operation above enumerated, the head of the bone is already out of its socket, all proceedings for bringing about its enucleation are superfluous, and the remaining manipulations, which may be required for removing the disease, are so simple and evident as to demand no detailed description. Oppenheim, Seutin, and others, likewise employed this method and recommend it above any other. Several surgeons have, however, found the space afforded by a simple incision too limited for completing the operation, and, therefore, to obtain sufficient room, have performed a species of flap operation.

"In the first excision of the hip-joint performed by Ferguson, and which is described at length in the Transactions of the Medico-Chirurgical Society for 1845, a single longitudinal incision along the outside of the trochanter was sufficient. In the two later excisions which I saw him perform, in the autumn of 1847 and the spring of 1848, such an incision, with which the operation was begun, afforded too little space, on which account another was made, perpendicular to the first and passing through its lower end, so as to form an incision in the shape of an inverted T (thus  $\perp$ ). This seems, in most cases, to be the simplest and best. Accurate care must be taken, in making the incision across the femur, not to let it extend so far, anteriorly or posteriorly, as to injure the nerves, much less the trunks of the blood-vessels. No bleeding of serious conse-

quence is to be apprehended. The arteries which might by possibility come under the knife are branches of the ischiatic, and, where the head of the bone is drawn strongly backwards and very high on the dorsum of the ilium, of the gluteal. The arterial trunks ought, in the great majority of cases, to be sufficiently protected by their situation. From his own experience, Fergusson disapproves of the attempt to pass a chain-saw round the exposed portion of the femur, while still *in situ*, in order to accomplish its removal. Instead of this, he recommends that, after a sufficient space has been obtained by one or more incisions, the diseased portion should be brought out through the opening by means of strong adduction of the limb; and then that the soft parts should be gradually loosened around the bone, so that the sawing through the latter, which is accomplished with an ordinary amputation saw, may take place in the sound substance of the bone. In the first case of this operation performed by Fergusson, four and a half inches of the femur were taken away from a boy, fifteen years of age. The patient lost scarcely an ounce of blood, and no vessel required to be tied. The reactionary fever was inconsiderable; and the system appeared, on the whole, to be benefited by the operation. A considerable portion of the wound healed by the first intention, night sweats and other hectic symptoms gradually disappeared, and, after six months, the boy's health and strength were completely restored. Two small fistulous openings remained in the line of the cicatrix, but they gradually contracted in proportion as the secretion diminished; and no symptom existed of any disease remaining in the femur or pelvis. The end of the bone, from which the portion had been sawn off, rested against the acetabulum, and a kind of articulation was subsequently formed between them. The limb was two and a half inches shorter than the other; the difference between the shortening and the length of the removed portion depending on this, that the measurement of the latter followed the curve of the neck of the femur.

“A circumstance which the surgeon ought never to omit in this operation is, the investigation of the state of the acetabulum, and the condition of the bone in its immediate vicinity. The leaving behind of ever so small a diseased portion, which might easily be taken away in the operation, may destroy the whole result, and may lead to a speedy return of the disease in a still more dangerous form. If the acetabulum and surrounding parts are found to be sound, the operation is concluded when the diseased portion of the femur is removed. If, on the contrary, the edges of the acetabulum be carious, the diseased



portion is best taken away with a Liston's forceps. Should the walls or fundus of the acetabulum be ascertained to be superficially affected, the diseased part should be removed with a gouge. I have seen Fergusson, in a case of excision; take away the greater part of the margin of the acetabulum when affected with caries. In fact, the operation in question should never be undertaken without the instruments I have enumerated being at hand.

“*Treatment after Operation.*—The bandaging and management after the operation ought to be conducted according to the general and well-known principles for the treatment of wounds. The introduction of any irritating applications, such as lint, tents with ointments, &c., into the depth of the wound, should be especially avoided. The edges should be immediately drawn together, leaving, however, a sufficient opening in a suitable situation for the escape of the discharge. Beyond this, the lighter and simpler the applications are, the better. A compress dipped in water from which the chill has been taken, laid over the hip, and renewed every hour or half-hour, is, in most cases, quite sufficient. After suppuration has set in, this is changed for an application of lukewarm water, or for poultices; the latter, however, are in general more troublesome, and, when used for a long time, are much more expensive. When the wound has filled up tolerably well, and the discharge has in proportion diminished, dry applications are the best. Should the process of healing be suspended before this, and the edges of the wound assume a less healthy aspect, it is advisable to insert long pieces of lint steeped in a solution of chloride of zinc, in the proportion of from one to three grains to the ounce of water, which is to be changed two or three times a day or oftener, the wound being from time to time cleansed by injections of tepid water, with or without the addition of vinegar. After such an operation, the situation and fixing of the limb operated on demands distinct attention. It must, by means of a suitable apparatus, be kept straight and extended, and placed in a position, as far as possible, to counteract the loss of a portion of the skeleton. The extension must be so adapted as to prevent the upper extremity of the resected shaft from lying too high up, and so gliding on the dorsum of the ilium, by which the leg would be rendered shorter than absolutely necessary. Nor should the leg be drawn too much down, so as to create a more considerable distance between it and the acetabulum, in consequence of which firmness and security in the motions which may be obtained might be either rendered altogether impossible, or not be attained until after a very long time. This evidently

depends on the fact, that the false joint, the rapid and as perfect as possible formation of which is so necessary and desirable, is either not at all produced, or not for a length of time, in consequence of the parts being so far removed from one another. The inconvenience of this is more perceptible in proportion to the more advanced age of the patient, and his consequently diminished reparative powers. In children the removed portion of bone is here, as elsewhere, often replaced with surprising completeness and rapidity. Experience has also shown that the prognosis, in reference to the operation, is in general more favourable with them than with adults.

“The apparatus for extension which I saw Fergusson employ, and which seemed to be equally simple and adapted to the purpose, consisted of a long splint, similar to that employed by Boyer in fracture of the neck of the femur. This extended about four inches above the crest of the ilium; and in order to facilitate the dressing of the wound (Fergusson employed only ‘water-dressing’), the upper part answering to the hip and femur was moveable, being fixed to and in the line with the lower and longer part of the splint by a sliding bolt. The latter could thus be left untouched during the application of a poultice, by which the inconvenience of so often moving the limb was avoided; the dressing of the wound also was much more easily accomplished, and with less loss of time.”

It does not appear that our author, whom we know to be a young surgeon of much promise, has as yet had much experience in the treatment of such severe cases of hip disease as he has here adverted to; but it is plain that, from what he has himself seen in the practice of others, he is a warm advocate (under certain circumstances of advanced disease of the hip-joint) for the operation of excision of the head of the upper extremity of the femur being performed, together with the removal, if necessary, of any portion of the acetabulum which may be discovered to be carious.

Indeed the result of the first excision of the head of the femur, performed by Mr. Anthony White, in 1818, so far as one case goes, is very strongly in favour of this operation being had recourse to, when the disease is in an advanced stage, and the head of the bone dislocated on the dorsum of the ilium.

Mr. A. White's patient could, at the end of a year after the operation, walk on a high stirrup several miles, without the use of a crutch or stick. It appears he acquired almost all the motions of the hip-joint except those of rotation and abduction. He laboured as a shoe-maker for nearly five years, and



then got phthisis, and died. By consulting the catalogue of the museum of the College of Surgeons of England, we find that both the os innominatum and remains of the femur were *slender, small, and light*. The upper part of the shaft of the femur was found placed opposite to the posterior part of the acetabulum, to which, as well as to the adjacent part of the ilium, it was firmly, but moveably attached, by dense ligamentous tissue<sup>a</sup>.

It would appear that this patient had been attacked with morbus coxæ, when he was only five years of age; that he was eight when the operation for the excision of the head and neck of the femur, together with the two trochanters, was performed; and that he lived until he attained the age of thirteen years.

We may here remark, that one of the strongest arguments against the propriety of having recourse to such an operation as this of A. White has always been, that, in cutting out the head of the bone, we are in danger of removing only a portion of the disease, as the bones of the pelvis are usually implicated in the caries; yet, in this case, we find that Mr. White states the disease had been of three years' duration: "When I first saw him," he says, "he was much emaciated; several abscesses had formed during the period, over and around the diseased structures, having many fistulous openings, through which the probe easily detected the surface of the displaced bone to be in a state of caries; and several small exfoliations had occurred from the ilium, ischium, and os pubis, over which abscesses had formed."

The good result in this very fortunate case may give us encouragement to operate on very young subjects; these, we know, are more likely to be able to bear up against the increased suppuration, which for a time must necessarily follow on such an operation, than those who are older. The termination of the patient's life ultimately by phthisis cannot be adduced, in our opinion, as any argument to show that the resection alluded to should not have been performed. We learn from the observation made on the motions the femur enjoyed after the operation, that they were limited, and that rotation could not be performed. Indeed this might be inferred from the necessary removal of the neck of the femur, which we are aware is the lever of rotation.

The *post mortem* examination of the new joint showed that the union was by means of ligament, and that what remained of

<sup>a</sup> See Catalogue, vol. ii. p. 230.

the femur was "*slender, small, and light.*" That this shall always be the consequence of the operation in question in young subjects, is only to be expected; because we must recollect that the line of the superior epiphysis, in which the seat of the growth in length of the femur principally resides, is, in such operations, included in the parts removed.

Mr. Fergusson, of London, has the merit of having revived this operation in 1845, and his account, in the *Medico-Chirurgical Transactions*, shows that his patient, aged 14, had been much improved by the operation. Although we find this case again alluded to by Mr. Fergusson, in 1849, no further particulars are given, which is a matter to be lamented; for it must be recollected that those who recommend this operation do so on the principle that a source of constitutional irritation is thereby removed, whence the patient's general health is more speedily restored; and that the limb, by this proceeding, is brought into better position, and thus made useful to the patient in progression. It is only by following out the history of these cases after they have long left our hospitals that we can arrive at correct conclusions as to the real utility of the operation.

Mr. Fergusson has had several similar cases, and we find him, consequently, a very zealous advocate for this operation; however, we should recollect that he speaks with caution, and he does not bring the operation forward as the treatment for hip disease: "I advocate," he says, "the practice as being applicable to certain cases only, and these cases seem to me to be so few in number that years may be passed in active practice ere such an instance may pass under the surgeon's notice." And he elsewhere also has observed, "that there had been much discussion as to the propriety of this operation; it was a subject that admitted of, and ought to have, a fair and open discussion amongst surgeons"<sup>a</sup>.

Mr. H. Smith is less reserved in his recommendation of the practice we are now describing. In presenting two specimens of the head and neck of femora removed by operation, the one by himself, the other by Dr. Morris, of Spalding, he said, he "did not bring forward these specimens for the purpose of arguing about the propriety of the operation of excision of the head of the femur, as that was now a settled question, but merely to show the pathological difference in the bone so beautifully marked"<sup>b</sup>.

As to the all-important opinion of Sir Benjamin Brodie on

<sup>a</sup> *Medical Times*, July 28, 1849, p. 79.

<sup>b</sup> *London Medical Examiner*, by Crisp, vol. ., 1851. p. 71.



this question, we quote the following passage in full, which is all we find in his work on this point :

“In an old case of diseased joint, the head of the femur may sometimes be felt lying on the dorsum of the ilium ; and in consequence of the general emaciation of the patient, and the wasting of the muscles, with so little soft parts over it, that it seems to be almost immediately beneath the common integuments. In such a case, it has been proposed to make an incision on it, and remove the head and neck of the femur by a saw. It would appear that this operation has been actually performed with some degree of advantage ; and I do not doubt that circumstances may occur to make it worth while to have recourse to it. But it is to be observed, at the same time, that all that can be thus accomplished is the removal of one portion of the disease, and that it is the largest portion of it in the bone of the pelvis, which is necessarily allowed to remain. The operation cannot be performed without a certain degree of local disturbance, and more or less loss of blood ; and taking all these things into consideration, I conceive that he should not recommend it except where some very unequivocal advantage may be expected from it”<sup>a</sup>.

Mr. Syme, of Edinburgh, is, of all surgeons, the most strenuous opposer of A. White’s operation.

“Some operations have been lately performed in London,” he says, “with the view of remedying caries of the hip-joint by cutting out the head of the thigh bone ; but this proceeding must have originated and been conducted in forgetfulness of the well-established pathological fact, that where caries attacks the surface of a joint, it is never limited to one of the bones which compose the articulation.

“If the articulating surface of the head of the thigh bone be carious, it follows, as a matter of absolute certainty, that the acetabulum must be in a similar condition. But as the acetabulum does not admit of a removal in the living body, with any prospect of safety or advantage, no benefit can be derived from taking away a part of the articulation ; and, therefore, any excision of the head of the thigh bone for caries of this joint should be regarded as no less erroneous in theory than objectionable in practice.”

While, then, a warm difference of opinion seems to exist as to the propriety of performing the operation of resection of the head of the femur, in such cases as those above alluded to, between such eminent surgeons as Messrs. Fergusson and H.

<sup>a</sup> Lancet, March 10, 1849.

Smith, of London, on the one hand, and Mr. Syme, of Edinburgh, on the other, it may be asked of us, what, on this important practical question, has been our experience here, and what our opinion? Our reply is, that we are not aware of any case of excision of the head of the femur for caries having been performed in Dublin, except the case referred to already, which was operated on by the late Mr. Hewson of the Meath Hospital. The result was most unfortunate and discouraging, and such an operation has not been repeated in this city, nor, as far as we know, in the provinces. Indeed, for ourselves, we must confess we would much prefer to leave the patient to his fate (if ankylosis could not be hoped for), rather than saw off the head of the carious femur; that is, supposing the patient were, as in Mr. Hewson's case, an adult. Experience teaches us that, in the ordinary cases of adults, in whom suppuration has occurred communicating with the hip-joint in consequence of morbus coxæ, the prognosis, as to the ultimate result, and as to the safety of the patient's life, should always be very unfavourable; because such adult patients have not resources in their constitution, like the young subject, nor are they found equal to bear up against the great increase of exhausting suppurations which must, for a time at least, immediately succeed to these operations. But let us suppose the case of a youth, under ten or twelve years of age, whose internal organs are sound, and who is affected with morbus coxæ in its third or fourth stage, the carious head of the femur dislocated on the dorsum of the ilium, with numerous sinuses, and the limb in the usual faulty position, adducted, flexed, and so placed and directed that, if ankylosis should take place, it would be worse than useless. Perhaps in such a case a surgeon, if he could not straighten the limb, might be justified in having recourse to Mr. A. White's operation.

But such cases, we imagine, are very rare, and likely to be more so; and this Mr. Fergusson himself admits. In the selecting of a case for such an operation, and giving our prognosis, &c., let us always bear in mind that morbus coxæ is usually rather a symptom of a general cachectic state of the whole constitution, than a local disease, removeable by a surgical operation.

The controversy as to the propriety or impropriety of performing these severe operations, in advanced cases of hip disease, can only be decided by time. After some years' dispassionate consideration and experience, and, above all, by the time-proved results of the many cases which have already been operated on, the question may be ultimately and fairly decided. The only case we may say we have as yet fully before us, is



the one operated on by Mr. Anthony White; as this patient was under notice for five years, and after his death the limb has been, as already mentioned, carefully examined. It is to be supposed that, on some future day, the sequel of the other cases also will be published.

We believe, however, that cases for such an operation will not hereafter frequently present themselves, because, according to the more improved plan of treating hip disease, the patient is not permitted to keep the thigh permanently flexed at a right angle with the pelvis and adducted, a position of the limb so favourable for dislocation of the head of the bone from the acetabulum, and so likely to induce the condition of things the excision of the head of the femur has been proposed to remedy.

In the modern plan of treating the early stages of hip disease, we are very sedulous in endeavouring to keep the limb always in that position in which, should ankylosis take place, it will be found most useful and most nearly to perform its normal functions. If, with such an object constantly in view, the limb be kept straight, or nearly so, it is not likely that dislocation will occur; and the operation of "resection" of the head of the femur is only to be contemplated in those cases in which the head of the femur has been displaced on the dorsum of the ilium, and in which, besides the other reasons for the excision, the local circumstances of the head of the bone and direction of the limb are observed to be such that, should even ankylosis occur, the limb would not serve usefully the purposes of progression.

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*Practical Remarks on the Treatment of Aneurism by Compression: with Plates of the Instruments hitherto employed in Dublin, and the recent Improvements by Elastic Pressure.* By JOLLIFFE TUFNELL, M. R. I. A., F. R. C. S. I., Surgeon to the City of Dublin Hospital; Surgeon to the Dublin District Military Prison; and Lecturer on Military Surgery in Dublin. Dublin: Fannin & Co. London: Churchill. 1851. 8vo. pp. 154.

To the Irish School of Medicine is pre-eminently due the merit of having revived and mainly contributed to the perfection of the treatment of aneurism by compression; while it can establish, no less satisfactorily, the most indisputable claims to the scientific elucidation of the principle on which this mode of cure is founded, and to the perfecting of the mechanical means requisite for its successful application. In addition, there has been no lack of able advocates to uphold

the merits of this modern improvement in practical surgery, against a more than usually vigorous display of prejudice and obstinacy, and an equally unworthy indifference, which, in more than one instance, as we shall presently have occasion to show, have been an obstacle to that careful examination and patient consideration of the mass of facts adduced in evidence, which even the *alleged* importance of the subject demanded at the hands of all those who, from the influence of their position, or their previously acquired scientific character, would be likely to direct the opinion of the schools to which they belong. We can now point to several writers amongst us, who have themselves not only practically aided in placing this method of treatment on its present firm basis, but have also eloquently urged the most convincing arguments in its favour; while to one, in particular, we owe a most learned and elaborate history of the various attempts, both recent and remote, which medical skill and ingenuity have made to supplant the knife in the treatment of this formidable affection<sup>a</sup>. Notwithstanding the publication of the excellent little work just alluded to, and a number of special monographs by some of the most distinguished of the surgical staff of our various hospitals, we were, however, very much in want of a book to which we could refer those who were anxious to examine the entire evidence collated from various sources, which has of late accumulated considerably, and could only be availed of by those who were willing to undertake a somewhat laborious search through the pages of our periodicals. This is the point of view in which Mr. Tufnell has taken up the subject; that he is fully entitled to enter the field, and to deal practically with the details of the process of cure, will be at once admitted, when we state that it has been employed in his own hands with not less than ordinary success.

Nearly four years have now elapsed since, in an editorial article, we presented our readers with a tabular view of the cases which had been treated by compression up to that period. Since then, no less than twenty-one cases have occurred in Dublin alone, so that, with the large number of instances now before us, in which the merits of compression have been tested by experience in different hands, it cannot be considered premature to say that we now demand for it, in all scientific circles, whether in Great Britain or on the Continent, the fullest and closest scrutiny, as well as the most calm and impartial consideration; and we do not think that we by any means lay ourselves open

<sup>a</sup> Observations on Aneurism and its Treatment by Compression, by O'B. Bellingham, M. D. 1847.



to the charge of exaggerating enthusiasm, when we state it as our conviction, that the time has now come for fairly balancing the weight of argument on both sides of the question, and finally adjusting the relative claims to superiority of the "knife" and the "compressor."

There is, perhaps, no way in which we can better lay before our readers clear and concise views of all the bearings of this highly important practical question, than by taking a glance at the statistical results obtained by the rival methods of cure. And, first, with regard to the ligature. It is really only since the introduction of Hunter's operation, which dates so recently as 1785, that the tying of an artery for the cure of aneurism can be at all considered as worthy to take a place amongst the accredited methods of treatment recognised by modern surgery. The success which attended this method, as well as the subsequent improvement by Scarpa, when compared with the older operations, gave it an early éclat, the very echo of which still affects the judgment of many in our own times, who, relying but little on their own powers of discrimination, are too much in the habit of receiving unquestioned dicta stamped with a traditionary authority. That a real advance had thus been effected it would be unjust to deny, but that the operation by the knife, even in the most skilful hands of the past or the present day, ever answered the requirements of being a safe and generally successful method of treatment, it would be equally far from the truth to assert. Dangers of no ordinary kind attend its performance, even under circumstances apparently the most favourable. The risk of life after a ligature had been tied on a vessel, even in the most dexterous and masterly manner, from secondary hemorrhage, phlebitis, sloughing of the sore, or mortification, reached a fearfully high figure in the scale of chances. And with the various other circumstances which help to complicate particular cases, it is to be regretted that a sense of that high responsibility which devolves on the surgeon who undertakes the performance of any capital operation, has not in every instance secured for compression, since its re-introduction, the test of a practical trial; especially when its application, if unsuccessful, would in no way, we assert, interfere with the subsequent adoption of the more favourite operation.

We proceed now to lay before our readers some statistical results, deduced from the works of the most recent systematic writers on the affections of the blood-vessels:—

Authors.	No. of Cases.	Operation.	Results.
Lisfranc <sup>a</sup> , Porta <sup>a</sup> ,	180 600	Ligature of femoral, Various,	Secondary hemorrhage in 32, or 1 in 6. Secondary hemorrhage in 75, of whom 30 died from the bleeding, and 14 from other causes.
Crisp <sup>a</sup> ,	256	Various.	21 died from hemorrhage, and 8 from other causes.
Phillips <sup>b</sup> ,	171	Ligature of femoral,	55 cases died, and amongst the succes- ful cases 15 were attended with se- condary hemorrhage.
Norris <sup>b</sup> ,	188	Various.	46 died, while the successful cases were complicated, in many in- stances, by hemorrhage, suppuration of sore, amputation, &c.

Here is an array of unfavourable terminations, sufficient to make the most warm advocate of the knife pause when he compares with them the balance-sheet presented on the side of compression. The reader will not fail to perceive that the mortality is remarkably high, varying between one-fifth and one-third of the entire number of cases; while even in those which recovered, we have to make deduction for amputations, mortification of the toes, sloughing, &c., before we can arrive at any just notion of the value of the returns usually made of "cured." Thus, for instance, in thirty-one of Porta's cases which recovered from hemorrhage, the plug was used in thirteen, torsion in four, *a second or third ligature in nine*, bandaging and cold applications in three, and amputation of the limb in two.

Let us now proceed to examine the evidence produced in favour of compression. In the table on the opposite page, which Mr. Tufnell has published, it will be seen that he has omitted all those cases which occurred previously to the year 1842; and further, that he gives no account of those treated elsewhere than in Dublin. Reference to the table given in a former number of this Journal<sup>c</sup> will show that he has thus deprived himself of evidence to be deduced from six cases treated in Dublin, from 1820 to 1842, of which three were cured by compression; and in the same manner nine more are excluded which occurred in various parts of England, and of which eight were successfully treated by similar means: thus giving a large proportion of successful terminations. Of the thirty-nine cases which have been under treatment within the last eight

<sup>a</sup> Crisp on Diseases of the Blood-vessels, pp. 190, 191.

<sup>b</sup> Miller's Surgery, p. 583.

<sup>c</sup> Vol. ii. N. S. p. 129.



No.	Surgeon.	Sex.	Age.	Form of Disease.	Right or Left Side.	Where treated.	When treated.	Duration of Compression.		Result.	When and where published.	REMARKS.
								Days.	Hrs.			
1	Dr. Hutton,	M.	30	Popliteal,	Right,	Richmond Hospital,	Oct. 3, 1842,	28	..	Cured.	Dub. Med. Press, May 3, 1843.	Same individual as Case 5.
2	Mr. Cusack,	M.	55	Popliteal,	Left,	Steevens' Hospital,	Jan. 17, 1843,	31	..	Cured.	Dublin Journal, May, 1843.	
3	Dr. Bellingham,	M.	32	Popliteal,	Right,	St. Vincent's Hospital,	Mar. 25, 1843,	2	..	Cured.	Dub. Med. Press, May 3, 1843.	
4	Dr. Harrison,	M.	29	Popliteal,	..	Jervis-street Hospital,	May 9, 1843,	93	..	Cured.	British Association Report, 1843.	Same individual as Case 3.
5	Dr. Bellingham,	M.	33	Femoral,	Left,	St. Vincent's Hospital,	June 20, 1844,	43	..	Cured.	Dub. Med. Press, Aug. 28, 1844.	
6	Dr. Kirby,	M.	28	Popliteal,	Left,	Jervis-street Hospital,	July, 1844,	53	..	Cured.	Dub. Med. Press, Sept. 25, 1844.	
7	Mr. Cusack,	M.	26	Popliteal,	Left,	Patient's residence,	Nov. 15, 1844,	7	..	Cured.	Dub. Med. Press, Feb. 25, 1845.	Artery tied, and recovered.
8	Mr. Porter,	M.	29	Popliteal,	Right,	Meath Hospital,	Dec. 31, 1844,	24	..	Cured.	Dub. Quart. Jour., May, 1846.	
9	Mr. Cusack,	M.	30	Popliteal,	..	Steevens' Hospital,	Mar. 12, 1845,	20	..	{ Died of disease } of heart.	Dub. Quart. Jour., Apr. 30, 1845.	
10	Dr. Hutton,	M.	..	Popliteal,	..	Richmond Hospital,	June 23, 1845,	21	..	Ligature applied.	Dub. Med. Press, Feb. 6, 1850.	{ Traumatic aneurism, from gun-shot injury.
11	Dr. O'Ferrall,	M.	32	Popliteal,	Left,	St. Vincent's Hospital,	June 25, 1845,	33	..	Cured.	Dub. Quart. Jour., Nov. 1846.	
12	Mr. Cusack,	F.	40	Brachial,	Right,	Steevens' Hospital,	July 9, 1845,	9	..	Cured.	Not published.	
13	Mr. Porter,	M.	20	Popliteal,	..	Not stated,	July 28, 1845,	20	..	Cured.	Dub. Quart. Jour., May 7, 1846.	{ Left femoral artery previously tied for popliteal aneurism of that side.
14	Dr. Macdonnell,	M.	32	Popliteal,	Right,	Richmond Hospital,	Nov. 1845,	2	..	Cured.	Dub. Med. Press, May 21, 1846.	
15	Mr. Cusack,	M.	33	Popliteal,	Right,	Steevens' Hospital,	Feb. 1846,	43	..	Cured.	Dub. Quart. Jour, August, 1846.	
16	Dr. Bellingham,	M.	38	Popliteal,	Left,	St. Vincent's Hospital,	Feb. 10, 1846,	..	..	Died of erysipelas.	Dub. Med. Press, Oct. 14, 1846.	{ Previous, but ineffectual, compression had been made.
17	Dr. O'Ferrall,	M.	37	Popliteal,	Right,	St. Vincent's Hospital,	April, 1846,	11	..	Cured.	Dub. Quart. Jour., Nov. 1846.	
18	Dr. Humfrey,	M.	43	Popliteal,	Right,	Royal Military Infr.,	Feb. 9, 1846,	..	10	Cured.	Dub. Med. Press, Oct. 14, 1846.	
19	Dr. O'Brien,	M.	34	Popliteal,	Right,	Adelaide Hospital,	Oct. 1846,	72	..	Cured.	Dub. Med. Press, May 12, 1847.	{ The aneurism never increased. This is the same individual as Case 19.
20	Dr. Bellingham,	M.	34	Popliteal,	Left,	Patient's residence,	Feb. 1847,	21	..	{ Pressure dis- } continued.	Unpublished.	
21	Mr. Smyly,	M.	48	Femoral,	Right,	Meath Hospital,	April, 1847,	70	..	Cured.	Dub. Med. Press, Dec. 11, 1850.	
22	Dr. Humfrey,	M.	31	Femoral,	Right,	Royal Military Infr.,	July 21, 1847,	..	33	Cured.	Dub. Med. Press, Dec. 1, 1847.	Same individual as Cases 28 and 36.
23	Mr. Tufnell,	M.	27	Popliteal,	Right,	Patient's residence,	Nov. 5, 1847,	6	..	Cured.	Dub. Med. Press, Dec. 1, 1847.	
24	Mr. Cusack,	M.	30	Popliteal,	Right,	Steevens' Hospital,	April 22, 1847,	4	..	Cured.	Dub. Quart. Jour., Aug., 1847.	
25	Dr. Orr,	M.	27	Brachial,	Right,	City of Dublin Hosp.,	Aug. 21, 1847,	..	..	Ligature applied.	Dub. Med. Press, March 8, 1848.	High bifurcation, two vessels secured. Recovered.
26	Dr. Fox,	M.	30	Femoral,	Left,	Military Infrmary,	May 10, 1848,	..	..	Amputation.	Dub. Med. Press, Dec. 20, 1848.	
27	Dr. Hutton,	M.	34	Brachial,	..	Richmond Hospital,	July 22, 1848,	12	..	Cured.	Dub. Med. Press, May 16, 1849.	
28	Mr. Tufnell,	M.	28	Popliteal,	Left,	Patient's residence,	Nov. 1848,	42	..	Cured.	Dub. Med. Press, May 16, 1849.	Traumatic aneurism. Same individual as Cases 23 and 36.
29	Dr. Hutton,	M.	32	Popliteal,	Left,	Patient's residence,	Jan. 3, 1849,	..	7	Cured.	Dub. Med. Press, May 16, 1849.	
30	Sir P. Crampton,	M.	11	Radial,	Left,	Patient's residence,	July 28, 1849,	..	16	Cured.	Dub. Med. Press, Sept. 12, 1849.	
31	Dr. Banon,	M.	27	Popliteal,	Left,	Jervis-street Hospital,	Sept. 11, 1849,	5	..	Cured.	Dub. Med. Press, Nov. 28, 1849.	Traumatic aneurism. Same individual as Case 33.
32	Dr. Clayton,	M.	25	Popliteal,	Right,	Military Infrmary,	March, 1850,	..	39	Amputation.	Unpublished.	
33	Dr. Clayton,	M.	25	Popliteal,	Right,	Military Infrmary,	April, 1850,	..	..	Died.	Dub. Med. Press, March, 1851.	
34	Dr. Read,	M.	28	Popliteal,	Left,	Mercer's Hospital,	August, 1849,	..	..	Cured.	Unpublished <sup>a</sup> .	Died of diseased heart and lungs.
35	Dr. Hargrave,	F.	22	Femoral,	Right,	City of Dublin Hosp.,	July, 1850,	20	..	Cured.	Unpublished.	
36	Mr. Tufnell,	M.	29	Femoral,	Left,	City of Dublin Hosp.,	Sept. 1850,	13	..	Cured.	Unpublished.	
37	Dr. Bellingham,	M.	44	Femoral,	Right,	St. Vincent's Hospital,	Dec. 1850,	..	23	Amputation.	Unpublished.	Same individual as Cases 23 and 28.
38	Dr. Quigley,	M.	32	Popliteal,	Right,	Artillery Hospital,	Jan. 1851,	..	..	Cured.	Unpublished.	
39	Mr. Colles,	M.	29	Femoral,	Right,	Steevens' Hospital,	Feb. 1851,	37	..	Cured.	Unpublished <sup>b</sup> .	

<sup>a</sup> To be published in our next Number.

<sup>b</sup> Published in our present Number.

years, thirty are examples of complete and perfect cure, being in the proportion of seventy-seven per cent., within a fraction! Of the remaining nine, it must be at once admitted by all candid minds, that in eight compression was by no means fairly tried. In one the aneurism showed no increase in size during four years after the application of pressure for a short period, which was discontinued, as the man had a large family to support, and the disease did not prevent him from following his employment. In the next two the ligature was employed; in one owing to the excessive irritability of the patient, and in the second owing to a high bifurcation of the brachial artery; and, in reference to this case, we would suggest that, with the present improved means for applying pressure, there can be no reason why a simple apparatus should not be devised, which would control both arterial trunks.

With regard to the three cases in which amputation was performed, we beg to refer our readers to Mr. Tufnell's detailed account of their history. We perfectly agree with him that they were not cases for a fair trial of compression; and it cannot be urged, with the slightest shadow of justice, that its employment had anything to say to rendering the subsequent removal of the limb necessary.

The last and most important consideration has reference to the three instances in which compression was used, and where, either consequent on, or during its employment, death occurred. (See Table, Cases 9, 16, 34). On these important points we beg to quote Mr. Tufnell's own words:

"The first case was that of a man who had a large popliteal aneurism, with a thin sac, so rapidly increasing in size as to require immediate interference to prevent its fatal extension. Combined with this were symptoms of disease of the heart—viz., patency of the mitral and semilunar valves. The pulsation ceased in the aneurism after very slight compression had been used for twenty days. This patient died suddenly, forty-eight hours after consolidation of the aneurism, and gave the following result upon examination of the limb.

"There was some slight thickening of the cellular tissue surrounding the vessel at the situation where pressure had been made, *but no change whatever in the vessel itself.*"

"The second instance occurred in the practice of Dr. Bellingham, and is thus reported by him in a communication on the subject of compression in aneurism, published in the Medical Press for October 14, 1846. After detailing the particulars of the case, as to its history, Dr. Bellingham proceeds: 'After compression had been used for some time, as the pulsation continued to be strong, it was resolved to give a trial to galvanism, combined with compression. By applying pressure upon the artery above and below the aneurism, so as to retain



the contents of the sac until acted on by the galvanic current, it was expected that one of the principal causes of failure would be avoided; the case likewise seemed a favourable one in this respect, that the blood contained a very large amount of serum in proportion to the fibrine.

“ ‘On the 21st of April a clamp was applied upon the artery above the aneurismal sac, and another below. Two acupuncture needles (insulated, except at their points and hafts) were then introduced from opposite sides into the aneurismal sac, and brought into connexion with a Smee’s battery by Dr. Apjohn, Professor of Chemistry to the Royal College of Surgeons, who kindly afforded his services, and the galvanic current was maintained by him for about fifteen minutes at intervals. It was intended to repeat the application after a short period, and in the mean time the patient was ordered to continue compression as before.’ In order, however (as he thought), to hasten the cure, he kept up strong pressure upon the artery for many hours. Seven days after employment of the galvano-puncture he was seized with severe rigor, and erysipelas attacked the part of the thigh upon which the pad of the instrument rested; it spread upwards and downwards, and the patient sunk in six days from that time.

“ ‘This patient died then of a disease which was prevalent in the hospital at that time. But will any one pretend to say that if a ligature had been placed upon the artery upon the 21st of April, and galvano-punctures subsequently applied to the sac, erysipelas would not, in an unhealthy man (as the subject of this aneurism was), have attacked the wound, or phlebitis supervened, and been equally fatal in the end? I give the case fact for fact, as it stands, and leave practical surgeons to decide as to how far it can be adduced as a reason for not resorting to compression in cases otherwise suited to this mode of cure. In my own opinion, it is no argument at all.

“ ‘Lastly, we come to No. 34. This patient was admitted into Mercer’s Hospital, under the care of Mr. Read, upon the 15th of August, 1849, for aneurism of the left popliteal artery, and the details of the case have just been published in the Medical Press, by Mr. Butcher.”

“ ‘Coupled with the local disease, there was severe palpitation, and dyspnœa on the slightest exertion; symptoms that were accounted for upon examination of the chest, which revealed extensive hypertrophy with dilatation of the left ventricle of the heart, open aortic valves, and tubercle in the upper portions of the right and left lung.”

“ ‘This case exactly bears out what I have already adverted to, at page 44. It shows the applicability of compression to the cure of an aneurism, under circumstances where the ligature could not with safety be recommended. There was at this time, it is true, a rapidly distending aneurism, which required to be checked, but there was also a diseased condition of the heart, and tubercle in either lung—two states certainly very unfavourable for the knife.

“Compression was therefore commenced in the ordinary manner, and continued, with but little interruption, for *five months*, until the 13th of January, 1850, when it resulted in final cure of the local disease. The pulmonary affection meanwhile ran on unchecked, terminating in death, on the 19th of this month.”

We may now proceed to estimate the total amount of success in all the cases at present under our notice, including the thirty-nine given by Mr. Tufnell, and fifteen in our former series<sup>a</sup>. Of these fifty-four cases, forty-one, or seventy-five per cent., were cured (and we would venture to say that, by selecting cases in every way suitable, cent. per cent. would be cured); one died; but, as we have just seen, this death cannot by any means be put to the account of compression; and of the remaining twelve the ultimate termination cannot, in a single instance, be considered directly connected with the employment of this mode of cure. With regard to the duration of the compression, it has been found to vary within very remarkable limits: thus, in one case, the contents of the sac were solidified, and consequently the main feature of cure accomplished, in *seven hours and a half*; while in these cases which must be regarded as in every way exceptional, the treatment occupied respectively ninety-three, seventy-two, and seventy-days: but, even including these high figures, Mr. Tufnell has deduced the average period as twenty-five days.

These are results to which we can confidently point as promising a brilliant career for the treatment of aneurism by compression. Sanguine as its advocates may be, however, there is not one who will pretend to say that it is applicable under all circumstances, or can be indiscriminately employed. No; discrimination must be exercised with regard to the cases in which we apply it, if we would hope to succeed by its aid; while again, subordinate as the consideration may appear at first, the instruments employed, and the judicious use of them, are eminently connected with a favourable result. For ample details on both these heads, we have great pleasure in referring our readers to the work under consideration. The directions will be found copious, lucid, and well arranged. We cite the following as an example:

“You may ask me, then, what are the cases in which I recommend pressure, and what those where I would resort to the knife? I will tell you.

<sup>a</sup> The publication of Mr. Tufnell's work at so short a period before our going to press has alone prevented us from prosecuting a further search through the different British and foreign periodicals, so as to complete these tables up to the present time.



“I consider compression applicable to every ordinary circumscribed aneurism in an extremity, where there is sufficient room for the application of the compressing medium at two different points above the tumour, premising, of course, that pressure on the trunk of the vessel completely controls pulsation in the sac, thus proving that no high bifurcation exists.

“I do not advise it in cases which are rapidly extending in size, or where they continue to do so after compression has been tried. These aneurisms have no distinct sac; and to afford any chance of saving the limb, the blood through the main channel *must be cut off, and at once*, by securing the vessel.

“I do not advise or sanction it in cases where the disease has been allowed to run on unchecked, where the limb has become œdematous and swollen, and the surface of the aneurism a dusky, yellowish red. In such a case the vein is most probably engaged, and, if it be a popliteal aneurism, the knee-joint inflamed. Here, I believe, amputation is the only resource.

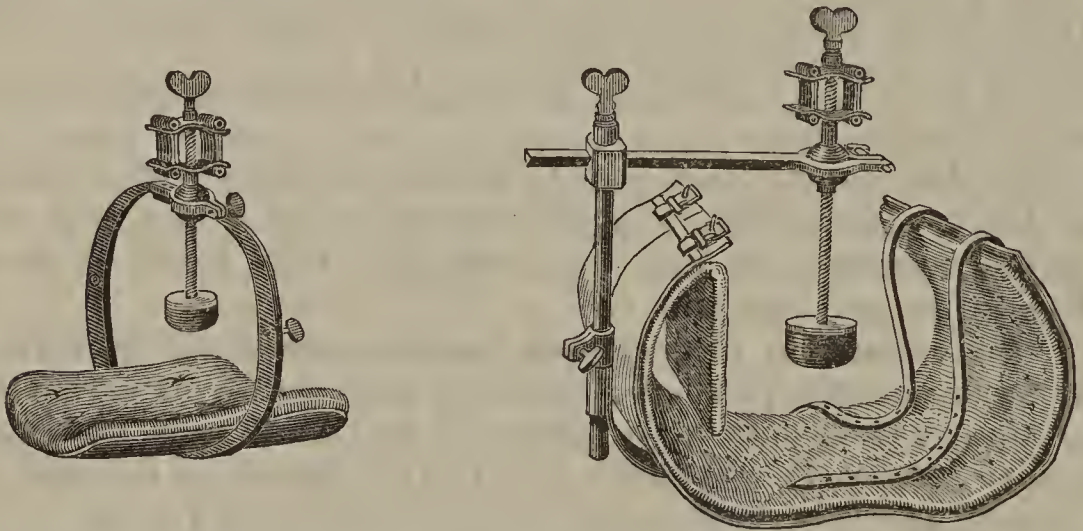
“Understand me, then: compression I advocate only in cases where the sac is entire, and where sufficient room exists for applying the pressure on two points of the artery above. At the same time, cases have so frequently occurred where the application of a single instrument has been sufficient for a speedy cure (*such, for instance, as one that I saw under the care of Dr. Hutton, where popliteal aneurism of a considerable size was in seven and a half hours, by means of a single instrument, constructed on Dr. Carte's plan, rendered completely solid*), that, although, for prudence sake, and as a general principle, I advocate the employment of two points of pressure, yet I by no means hesitate to employ a single instrument, and give the patient every chance, prepared at the same time to use the ligature if any necessity arise.”

A most valuable adjunct to the employment of well-directed pressure will be found in the use of suitable constitutional means. Of this fact, two highly illustrative cases have already appeared in our pages<sup>a</sup> from the pen of Dr. O'Ferrall, which clearly show that different and even *opposite* methods of constitutional treatment are required in different cases. Thus, in one instance, a bleeding to the extent of twelve ounces, and the exhibition of ten drops of tincture of digitalis three times a day, were indicated, and adopted with marked benefit, whilst a chalybeate treatment was no less conducive to the favourable termination of the other case.

The instruments employed next demand our attention. The history of this portion of the subject, as detailed by Dr. Bellingham, is extremely interesting. From the *ponton* of l'Abbé Bourdelot, invented by and successfully used on himself

<sup>a</sup> Vol. ii. N. S. p. 372.

for the cure of a wound in the brachial artery, to the elastic compressor now in use, the greatest variety will be found as to the mechanical means employed. Mr. Tufnell has presented us with excellent lithographs of those which have been employed at various intervals in Dublin, the earliest of which is that of Mr. Todd's invention. But it cannot admit of doubt that they are all destined to be superseded by that which has been so usefully modified by Dr. Carte. The accompanying



wood-cuts<sup>a</sup> give an excellent representation of the pelvic apparatus, and also the circular thigh compressor, now in use in Dublin. A simple inspection of these drawings will enable any one to recognise the principles on which the instruments work, the numerous facilities for easy adjustment, and the simple but eminently useful additions of vulcanized caoutchouc bands, which give to the pressure a high degree of elasticity.

With regard to the application of the first point of pressure, Dr. O'Ferrall has thrown out some useful hints. His researches tend to show the superiority of *pressure at the groin* over that applied in other situations for the cure of popliteal aneurism. He says:

“ In considering the anatomy of the parts, it appears very probable, that when compression is made high up, the vein may be avoided, while such an exemption would be quite impossible lower down, where the vein slips behind the artery, and must of necessity receive its share of the pressure. The possibility of avoiding the vein, while compressing the artery at the groin by the finger, may be ascertained by any one who takes the trouble to make the experiment with care. I have demonstrated this repeatedly to the class, and shown the alter-

<sup>a</sup> For the use of these wood-cuts we are indebted to Messrs. Fannin and Co., of Grafton-street, the manufacturers of the instruments, as improved by Dr. Carte.



nate interruption to the current through the artery, and the turgescence of the saphena, made at will, according as the finger was shifted from one vessel to the other."

"It is obvious to the least reflection, that effectual pressure at the groin cannot be made in the direction of a line dropped perpendicularly to a limb in the horizontal position. It must be made in a direction upwards and backwards in order to compress the artery against the pubis. And as the angle at which this force is to be directed will change with every new subject, or in the same subject at different times, it becomes necessary to devise a power of altering the inclination according to circumstances."

For further practical directions as to the methods of applying the pressure alternately, the manœuvres to be adopted, and the precautions to be used, we must again refer to Mr. Tufnell. Want of space alone prevents us from entering more at length into this important subject; but, in recommending his work to the notice of the profession, we feel that, as far as verbal description can supply information, it will be found practically useful. We must also add, that the lithographs of the various instruments which accompany it give faithful and clear representations of them.

Before finally closing our too brief notice of this highly important topic, a sense of duty compels us to take a rapid survey of the manner in which the recent efforts of the Irish school to revive the treatment of aneurism by compression have hitherto been received in the sister kingdom and on the Continent. In London, so early as 1843, it had secured the advocacy of Mr. Liston. In 1847, Mr. Crisp says:—"I have no doubt but that this method of treating aneurisms of the femoral and brachial arteries will, after a few years, be universally adopted; and a surgeon will not consider himself justified in using the knife, until pressure has had a fair trial." We have seen that a very eminent authority of the same school has recently pronounced in favour of compression in no qualified terms. In many provincial towns of England its success has been attested by experience. In Edinburgh, Mr. Miller, in his recent *Principles of Surgery*, speaks of its value with candour and justice, and draws a comparison between the results which have been thus already obtained, and those by the ligature. But, in the same city, it has met an antagonism as formidable as its author is able and eminent. Though we do not consider that the treatment of aneurism by pressure has received at the hands of Professor Syme that calm and dispassionate reception to which it is entitled from every scientific man, far be

it from us to impeach his good faith, or attribute his incredulity to anything save an imperfect examination of the evidence adduced. We doubt not that, when these pages meet his eye, or when he shall have perused the evidence so well drawn up by Mr. Tufnell, he will see full reason to put the subject to a practical test. Are we to take it as an indication that his steps are already turning towards us, that his recently published observations on clinical surgery contain an account of a case of radial aneurism cured by pressure? The remarks appended to the report are worthy of attention.

“A few weeks ago, as I was leaving the hospital,” says he, “a man, apparently somewhat under thirty years of age, showed me a tumour, about the size of a flattened gooseberry, at the root of his thumb, and said that ligature of the artery at the wrist had been advised for its remedy. The swelling looked so much more like a ganglion than an aneurism, that I supposed there must have been a mistake as to its nature; but, upon a more attentive examination, finding that there was a distinct expansive pulsation, I could not doubt that there was a sac communication with the radial artery, pressure upon which instantly lessened the swelling, and deprived it of the pulsating character. I therefore had a little spring constructed, upon the principle of a rupture truss, so as to press upon the vessel at the wrist, and at the end of twenty-four hours after it had been applied could not detect any trace of pulsation.”

“It may appear to you inconsistent in me to apply pressure at the wrist, instead of tying the radial artery, as I have strenuously contended against the substitution of pressure for ligature of the femoral artery. But the two cases are very different, since the latter-mentioned vessel has accompanying it the great venous trunk of the limb, which the utmost extent of human skill and care cannot prevent from being compressed along with the artery, and necessarily occasioning a degree of suffering to the patient, which must, if at all prolonged, infinitely exceed the trivial disturbance which attends ligature of the artery,—while the radial artery lies directly under the skin; rests upon the bone, and has no associate disposed to resent the effect of compression. I may add, that it has always been an established principle with me, that the radial artery and its branches at and below the wrist are completely under the command of pressure”<sup>a</sup>.

Now, Professor Syme, we appeal to you, as a surgeon and a gentleman, is this fair dealing with the salient points of the

<sup>a</sup> Monthly Journal of Medical Science, 1851, page 369.



question at issue? What! "The radial artery lies directly under the skin, rests upon the bone, and has no associate disposed to resent the effect of compression." No tyro in anatomy can be ignorant that the radial has *two* venæ comites, and as for their disposition to resent injury, we are not in a position to answer whether it be greater or less than that of any other satellite vein under similar circumstances. But there cannot be a shadow of doubt that it is far more easy to isolate the femoral, as it lies on the ilio-pubal eminence, on the same plane and external to its own vein, and with a fascial septum intervening, than the radial, or even the brachial. *Sæpe de lanâ caprinâ rixatur.* We would recommend to Professor Syme a perusal of the account of the anatomical examination of the vessels in Mr. Tufnell's three cases, and the following observations appended thereto:

"Thus it is in my power to show, that in none of these cases was there any injury whatever inflicted upon either artery or vein at the points where compression was applied. Such has been stated to have occurred, and the vein has been described as having been rendered 'white, thick, and patulous;' but none such existed here, nor do I believe it likely that this ever will happen under the use of that degree of pressure which we know is sufficient for cure, and beyond which it is unnecessary to go."

We shall, in fine, proceed to examine in what manner this subject has been considered by continental surgical authorities. We have such faith in the candid and impartial spirit of laborious inquiry which has ever characterized the researches of M. Cruveilhier, that we are confident it can be only an accident of the most unaccountable kind that could have prevented his meeting with the records of the cases in which this method had been successfully employed previously to the publication of the first volume of his *Traité d'Anatomie Pathologique Générale* in 1849.

The brief remarks which will be found at p. 290 of the great work alluded to, show that the subject had not at all received that amount of consideration at his hands, to which we feel confident he will now admit it is entitled. He says: "The compression of arteries by a tourniquet placed above the seat of aneurism has been abandoned as a method of treatment in those maladies, in consideration of its insufficiency to arrest the current of blood in the aneurismal sac." The subject is thus dismissed, but we are sure it will henceforward receive from this illustrious pathologist a more careful investigation.

In the pages of the "Jahresbericht," from which we have already so extensively quoted in a previous review, will be

found a very favourable report of the principal contributions to the literary history of this subject<sup>a</sup>. The reporter is Lœbel, and, after a full examination of the cases, which are almost entirely drawn from Irish sources<sup>b</sup>, he concludes with the following observations:—"In short, compression possesses all the advantages of the ligature, without any of its disadvantages, and the latter will soon find a place only in the *history of surgery*."

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*Queen's University in Ireland.—Calendar of Queen's College, Cork.* Dublin: Hodges and Smith. 1851. Post 8vo. pp. 177.

*Queen's University in Ireland.—Calendar of Queen's College, Galway.* Dublin: Hodges and Smith. 1851. Post 8vo. pp. 106.

FOLLOWING the example of their elder sister, the University of London, the three Queen's Colleges in Ireland have each published, this year, their first Calendar, two of which, those of Cork and Galway, are now before us. Of the manner in which they are brought out we cannot speak in terms of too high praise; indeed, of this, the fact of their having been published by the house of Hodges and Smith is sufficient evidence. A nearly similar arrangement is followed in both. They contain a College Almanac, in which the term days, &c., of the various departments, are given; an account of the foundation and constitution of each College; the charter of the Queen's University in Ireland, with the names of the first council, and the ordinances for university degrees; the plan of instruction pursued in the Colleges; the different faculties of the educational departments; the special courses of instruction; the College fees; the scholarship courses, and the names of those who have hitherto obtained scholarships; the prizes, and the names of the successful candidates; notices of the libraries and museums; &c., &c. And at the end selected Examination Papers for 1850 are appended. Each volume thus comprises a vast amount of information, most carefully put together; and in their publication we cannot avoid foreseeing the great influence which the provincial Colleges must, in a very few years, have in promoting the literary advancement of our country.

<sup>a</sup> Canstatt's Jahresbericht, Dritter Band, p. 199.

<sup>b</sup> Amongst the continental writers who have published on this subject we find the names of Frayes of Ghent, Sedillot, &c.



## PART III.

### REPORTS, RETROSPECTS, AND SCIENTIFIC INTELLIGENCE.

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#### PROCEEDINGS OF THE PATHOLOGICAL SOCIETY OF DUBLIN.

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##### ELEVENTH SESSION.—1850-51.

*Disease of the Aortic Valves.*—Dr. Banks detailed the case of a man, aged 47, who was admitted into the Whitworth Hospital on the 31st of December last. He stated that for ten years previous to his admission, he laboured under occasional “attacks of cough;” in fact, he had never passed a winter without having an attack of bronchitis, and even in summer he was not perfectly free from cough; at no period had he spat up blood. For twelve months before his admission, he laboured under occasional palpitations of the heart, with difficulty of breathing, upon even the slightest exertion. He had unpleasant dreams, so that he frequently started in his sleep, under the impression that some calamity was impending. A short time before the patient came under Dr. Banks’ observation all these symptoms became aggravated. His breathing was exceedingly oppressed, and he suffered from violent palpitation of the heart, and a disposition to faint. He had what he called “rheumatic pains,” but it could not be ascertained that he had ever laboured under acute rheumatism. When he was admitted into the hospital, his condition was that of extreme suffering and prostration. He could only breathe in the sitting posture, and occasionally had severe paroxysms of dyspnœa. On examining the chest by percussion, it was found perfectly resonant over its whole extent anteriorly; there was no cardiac dulness; posteriorly it was also resonant, with the exception of the base of the right lung, which, though not positively dull, was slightly so, as compared with other parts. The dry bronchitic sounds, ronchus and sibilus, were audible over nearly the whole extent of the chest, but at the base of the right lung there was a coarse muco-crepitating râle. It was impossible on his admission into hospital to make a satisfactory examina-

tion of the sounds of the heart, so loud were the bronchial râles, and so utterly impossible was it for the patient to hold his breath, even for a second. In three or four days the symptoms were in some measure mitigated, and then, on examining the heart, a loud endo-cardial murmur was audible at the base, completely obliterating the normal second sound. Three or four days before his death, although there was no diminution of the physical signs, he was enabled to lie down and get some sleep in the recumbent posture. He gradually sank, and died eight days after his admission. The patient presented during life all the symptoms indicating patency of the aortic valves; and, following the rules laid down by Dr. Corrigan, there was no difficulty in arriving at a correct diagnosis of the disease.

*Autopsy.*—On opening the chest, the lungs were found completely overlapping the heart, though there was enormous hypertrophy of that organ; there was no cardiac dulness, not even to that extent generally met with in healthy persons; there was a considerable amount of congestion of the lungs, and emphysema existed at their superior edges; they contained a considerable quantity of serum. Serum was also present in the pleuræ, which must have been effused within a few hours before death. The heart was observed to occupy nearly a horizontal position, a circumstance connected with imperfection of the aortic valves, to which Dr. Corrigan had directed the attention of the Society. It was enormously hypertrophied, the hypertrophy and dilatation being confined to the left ventricle. The semilunar valves of the aorta were found perfectly inadequate for the performance of their functions, for, on passing a stream of water into the aorta, it was found to flow readily into the ventricle. The whole extent of the thoracic and abdominal aorta presented the traces of disease of long standing. The aorta was dilated, and the lining membrane was rough from atheromatous and calcareous depositions. The chief point of interest in the case was the fact of the patient's improved condition a few days before death, though the disease was steadily advancing; and, on being questioned as to his sensations, he expressed himself as feeling more easy and comfortable than he had been for many weeks.—*January 11, 1851.*

*Acute Inflammation of the Medulla Spinalis.*—Dr. M'Dowel described the following case of this affection. Mary Livingston, of dissolute and intemperate habits, was admitted into the Hardwicke Hospital on the 4th December, 1850. She stated that about ten days before her admission she had been beaten severely about the head and back, and otherwise ill-used, while in a state of intoxication (a large bruise on the left temple corroborated her statement), that on the next day she suffered from severe pain in the region of the back and loins, and in the evening that she had a shivering fit, and sickness of her stomach, followed by the other ordinary sensations of fever. On admission, her countenance was sallow and anxious. She complained of pains all over her body, but particularly in the spinal region. The abdomen was tender to the touch,



but the cutaneous surface generally was likewise morbidly sensitive. The muscles of the nape of the neck were very rigid, and the motions of the head were limited. There was some sickness of stomach; skin hot; pulse 95, but small. These symptoms continued with very little variation for the next three days. On the 7th December she seemed much better and more free from pain, but there still remained morbid exaltation of the cutaneous sensibility, a rigid condition of the muscles of the nape of the neck, and irritability of the stomach. On the 11th December her symptoms were aggravated; she slept very little; had frequent vomiting, profuse perspirations, and great tenderness of the spine; her pulse was 108. On the 13th, convulsions suddenly supervened; the fits, which were of an epileptic character, lasted for about five minutes at each time, and in the intervals she had some broken sleep. The convulsions recurred with great frequency during the next two days, and there was partial suppression of urine. From this period up to the 19th, when death took place, the same symptoms continued. Her senses remained unimpaired until about twelve hours before death, at which period the pulse ceased to be perceptible at the wrist. There was no paralysis, nor sloughing of any part. Dr. M'Dowel remarked that it was evident, from the symptoms of this case, peritoneal inflammation was present, but there were also in a very marked degree the symptoms usually attributed to cerebro-spinal meningitis, that is to say, there was excessive sensibility over the surface generally, a peculiar rigidity of the extensor muscles of the head, which limited its motions, and, lastly, there were convulsions, which so frequently occurred in the advanced stages of that disease.

*Autopsy.*—Peritonitis to a limited extent was present; the ovaries were extensively disorganized, they were sacculated, and the cysts were filled with strumous matter mixed with blood. A large abscess existed in the region of the uterus, between its upper fundus and the rectum, and bounded by the bladder in front; but it did not communicate with any of the organs which surrounded it. Acute peritonitis was found in the hypogastric region. The contents of the spinal canal were next carefully examined, but none of the appearances of meningitis were found; the dura mater was healthy. When it was divided, a good deal of serum flowed out, which was clear and limpid, and was regarded merely as an augmentation of the sub-arachnoid fluid. The arachnoid membrane was perfectly healthy, nor was there any exudation of lymph between it and the pia mater, which has been so invariably an accompaniment of spinal meningitis. In point of fact, there was no inflammation whatsoever of the membranes of the spinal cord; but on cutting into the interior of the medulla spinalis abundant evidences of disease were found, as illustrated by the drawing which accompanied the specimen. The medulla spinalis was extremely vascular, its substance being everywhere pervaded by numerous red-coloured vessels arranged in an arborescent manner. The nervous mass was also diminished in consistence, being manifestly softer than natural, especially in its lum-

bar and dorsal portions; it was far, however, from being reduced to a pulpy or creamy consistence, and to this circumstance, perhaps, was attributable the absence of paralysis.

“In conclusion,” Dr. M'Dowel remarked, “when we review the history of this case, we find the symptoms of cerebro-spinal meningitis fully developed, without there being found after death any traces of meningeal inflammation. In this instance, convulsions and muscular rigidity, which Lallemand considers as almost peculiar to inflammation of the membranes of the nervous centres, and morbid exaltation of the cutaneous sensibility, which Ollivier confidently regards as pathognomonic of spinal meningitis, were associated, not with meningitis but with myelitis, or inflammation of the substance of the cord, whilst paralysis of the voluntary muscles, which usually accompanies this latter affection, was wanting. This was a fact worth placing on record, but he did not wish it to be inferred from this that he imagined the symptoms of spinal meningitis were not clearly established. The inference which he thought might fairly be deduced from the case he had detailed was, that the peculiar symptoms which all experience has proved to accompany spinal meningitis, owe their existence, not to any intrinsic peculiarity in the fibro-serous spinal membranes, whereby they differ from other similar structures, but to the circumstance that inflammation of them is propagated to the adjacent or subjacent portion of the nervous centres; or, in other words, that there would be no symptoms characteristic of inflammation of the spinal arachnoid, were it not for the contiguity of that structure with the great mass of nervous substance which it surrounds.”—*January 11, 1851.*

*Fatty Degeneration of the Kidney.*—Dr. Lees said, the specimen which he wished to bring forward for the consideration of the Society possessed interest, not merely with reference to morbid anatomy, but as an example of the sympathy which exists between the stomach and kidneys. It was taken from a man aged 47, of intemperate habits, who was admitted into the Meath Hospital, some months since, under his care. He came to the hospital, complaining chiefly of constant vomiting. He stated that he had vomited blood about twenty years ago, and ever since he has been subject to vomiting of an acid greyish fluid, generally in the morning, and accompanied by severe headach. He seldom vomited after breakfast, and for a long time he has been liable to slight attacks of hemoptysis. On admission, he presented a very emaciated, pallid appearance; he had no appetite; his bowels were greatly confined; he suffered from constant headaches. There was some tenderness on pressure over the epigastric region, which was slightly distended and tympanitic; and he had slight mucous expectoration. So far the symptoms tallied with the existence of some complaint of the stomach. On making further investigation, it was found that he suffered occasionally from pains in the lumbar region, but that he never observed anything wrong with his urine in quantity or in appearance. However, on examination it was



found to be very pale in colour; specific gravity, 1010, although a natural quantity was passed. No deposit or sediment appeared in it; but on testing it by heat and nitric acid, the presence of albumen was evidenced; the quantity of urea was also very small, much below the natural quantity. Upon placing it under the microscope there were visible one or two epithelial cells, mixed with oil-globules. From the examination of the urine, the conclusion was come to that it was a case of degeneration of the kidney. Very soon after this, Dr. Lees' term of duty at the hospital expired, and from that period he lost sight of the case, until he was one day going round the wards of the South Dublin Union Poor-house, when he recognised his former patient. He was then very much worse. Dr. Mayne soon after kindly acquainted Dr. Lees with the fact of his death, and he was thus enabled to obtain the present preparation.

*Autopsy.*—On examining the body, which was greatly emaciated, the stomach was found to be slightly distended, but otherwise perfectly healthy; there was no sign of disease apparent in it. The liver was slightly fatty. In the lungs there were some small fibrinous deposits, remains, apparently, of pulmonary apoplexy. Both kidneys were enveloped in a quantity of adipose tissue, the enormous quantity of which was still to be seen, although the kidneys had been kept in spirits of wine. The surface of the kidney was also peculiar; it presented a good specimen of granular degeneration; it was of a dirty greyish colour, and presented that stellated appearance which is so constantly found in this condition of the kidney. On making a section of the organ, the cortical structure presented a peculiar waxy shining appearance, and the interior of the kidney was found to be almost completely occupied by fat. In fact, between the internal structure of the kidney and the membranous reservoirs it was completely filled with fat. On placing a section under the microscope, the epithelial cells and annulated tubes were seen to be completely gorged. It might be mentioned Dr. Lees remarked, that this kidney had several times to be changed from the spirit in which it was put, in consequence of the quantity of oil floating upon the surface. The case tended to bear out the theory of Dr. Johnson, of London, and confirms some physiological experiments which he made along with Mr. Simon, in which it was found that, in an early stage of fatty kidney, plenty of oil-globules could be detected in the urine; but as the disease advanced, the oil-globules disappeared, and then albumen made its appearance: so in this case, though the kidney was found to be loaded with fat, yet scarcely any oil-globules appeared in the urine.—*January 11, 1851.*

*Fungus Hæmatodes of the Thigh.*—Professor R. W. Smith detailed the following case, and exhibited the recent specimen, together with a cast of the limb.

Frederick Unkles, aged 22, was admitted into Sir Patrick Dun's Hospital, in the month of November, with a tumour involving the

right thigh, from the knee to within four inches of the groin, of the origin and progress of which he gave the following brief account. One year and a half ago, at Bath, he first noticed it; it was then nearly as large as an orange, and placed at the inner and lower part of the thigh; it was freely moveable, and caused neither pain nor inconvenience of any description, until he happened to strike it against a lamp-post; it then became painful, and increased in size, in consequence of which he showed it to several medical men in Bath, and amongst the number to Dr. Norman. He told him, that unless he underwent amputation, the tumour would give way, and that he would bleed to death in a short time. He then went to London, and placed himself under the care of Mr. Bransby Cooper, in Guy's Hospital. That gentleman punctured the tumour upon more than one occasion; blood alone flowed from the wounds: amputation was then proposed to be performed, but the patient would not give his consent. He left the hospital in about two months, came over to Ireland, and was admitted into Sir Patrick Dun's Hospital, under the care of Dr. Law, in November last, previously to which the tumour had grown considerably, and, at the period of his admission, measured twenty-seven inches in circumference. It was of a uniform globular shape; its limits were clearly defined above, but below it was difficult to say whether it involved the knee-joint or not; its surface was very slightly discoloured, but everywhere traversed by largely dilated veins. Several of these venous trunks were nearly as large as the femoral vein, and seemed to be lodged in sulci left for them upon the surface of the tumour, and sufficiently large to admit of the little finger being placed in them edgeways. The consistence of the tumour was tolerably uniform throughout; it was free from pain, but the patient complained of an unpleasant sensation of heat in it. There was no enlargement of the inguinal glands; he had neither cough nor acceleration of pulse; he was not emaciated, nor did his general appearance or complexion indicate in any marked degree the presence of malignant disease in the system; the functions of the digestive organs were executed with regularity; in short, there was no constitutional disturbance. During two months succeeding his admission, nothing worthy of notice occurred, with the exception of a steady increase in the size of the tumour, so that it ultimately measured nearly a yard in circumference. About the middle of January, however, the tumour became prominent at its inner and lower parts, the skin thin and discoloured, and the usual deceptive feeling of fluctuation was communicated to the finger of the examiner. The poor boy, who was of a most reckless and thoughtless disposition, looked forward with high hopes to the giving way of the integuments. He said that when Mr. Bransby Cooper punctured the tumour, nothing but blood came; but that now it was nearly ripe, and that, when the skin gave way, there would be a copious discharge of matter, and that the tumour would then disappear. An effort was made to undeceive him, and he was told, that when the integuments ulcerated, the discharge would consist



principally of blood; but he ridiculed the idea, and the thinner the skin became, the higher his hopes rose, and the nearer he considered himself to be to a happy termination of his formidable disease. Towards the end of the first week in January, however, matters assumed a different aspect; the attenuated skin at length gave way, and a discharge of blood took place. Immediately a great change came over him; his reckless bearing disappeared, and he passed into a state of great excitement, from the fear of approaching death from hemorrhage. There was no necessity now to propose to him the amputation of the limb; he was himself but too anxious to have it performed; and when he found that all the surgeons who were at different times called into consultation upon the case were opposed to the operation, his excitement reached its utmost, and he made use of expressions calculated to produce the impression that he meditated self-destruction. Upon one occasion he handed a slip of paper to Dr. Law, upon which he had written, that he had some money in the savings bank, and that he would give him £5 if he would have the operation performed; but it was again and again explained to him that the removal of the limb afforded no prospect of saving his life, and that, even if he escaped the immediate danger of death from hemorrhage upon the operation-table, the disease would soon re-appear in some internal organ; and yet neither at this time, nor at any former or subsequent period, was there any symptom of visceral disease. The case now proceeded rapidly to its fatal termination. There was a continual discharge of fetid sanious matter from the ulcerated portion of the tumour, and almost daily a fearful gush of blood took place. Three days before his death he became composed, tranquil, and resigned; the tumour had ceased to enlarge since the formation of the opening upon its surface, but the opening itself had attained a considerable size, being five inches in diameter; the integument which formed its margin was thin and livid, and the surface exposed by the ulceration was made up, apparently, of sloughing encephaloid tissue, and decomposed blood. The smell was intolerably offensive, and the floor beneath the bed was clotted with blood, which was continually falling in thick heavy drops, having soaked through the bed-clothes and the mattress. His face was wan, his countenance haggard, his eyes and cheeks sunk, the surface pale and bloodless, and the limbs œdematous; he had palpitations of the heart, and a rapid and feeble pulse. A few days before his death he complained of pain in his right side, but, attributing it to a slight and accidental cold, he did not make use of the means proposed for his relief. He died on February 24th, not quite three weeks after the surface of the tumour had ulcerated.

Examined after death, the interior of the tumour presented the usual appearance of encephaloid disease; the structure of the morbid growth was remarkably soft throughout, and in some places semi-fluid; numerous masses of extravasated blood were scattered through it; a considerable portion of the femur was destroyed, but the knee-joint did not appear to have suffered. The posterior me-

diastinum contained several encephaloid tumours, some of which were as large as a hen's egg. Similar tumours of small size existed upon the surface of the lungs, beneath the pulmonary pleura.

*Malignant Tumour of the Orbit.*—Professor R. W. Smith exhibited a recent specimen, together with a series of casts and drawings, of a malignant tumour placed at the roof of the left orbit, and protruding into the cavities of the orbit and cranium. The subject of the case, a man aged 45, was for the first time seized with a sudden pain in the situation where the tumour subsequently appeared, in August, 1850. After the lapse of one month, the tumour began to show itself externally beneath the superciliary margin of the orbit; it rapidly enlarged, and depressed the globe of the eye, which was soon completely covered permanently by the upper lid, and about the same period the patient lost the faculty of vision in the left eye. In the month of October an abscess formed at the inner canthus of the right eye, upon the escape of the matter contained in which, by ulceration, the patient was able to see with the left eye. The most remarkable symptom throughout the progress of the case was extreme emaciation. There were not, at any time, symptoms of pressure on the brain, or of any cerebral irritation, with the exception of the temporary loss of vision in the eye of the affected side. The man died three months after the first appearance of the disease.

*Post Mortem Examination.*—The tumour appeared to have originated in the roof of the orbit; its surface was covered throughout a great portion of its extent by a delicate layer of bone, and its interior divided into numerous small cavities by thin osseous laminæ. The spaces thus enclosed were filled with cerebriform matter. The tumour had passed into the cavity of the cranium and filled a large portion of the left side of the anterior fossa of the base of the skull; it was here covered by the dura mater, and had formed by its pressure a deep concavity in the corresponding portion of the anterior lobe of the brain. It had also passed the middle line, destroyed a part of the cribriform plate of the ethmoid bone, and implicated a portion of the right orbit, passing through its roof near the inner canthus. The most remarkable features of the case were the rapid progress of the disease, the temporary loss of vision in the left eye, and extreme emaciation of the patient. For the opportunity of exhibiting the specimen, Professor Smith was indebted to Dr. Kirkpatrick, who had accurately observed the case during its entire duration, which extended over the short period of three months.—*March 1, 1851.*



## REPORT

ON THE PATHOLOGICAL MUSEUM OF THE BELFAST MEDICAL SOCIETY.

BY A. G. MALCOLM, M. D.,

ONE OF THE VICE-PRESIDENTS OF THE SOCIETY.

*(Continued from p. 214.)*

THE present portion of this Report comprises a brief account of twenty-one illustrations of disease received into the Museum since the 1st November, 1850. These may be conveniently arranged as follows :

## DISEASES OF THE BRAIN.

1. Prep. 206, Recent apoplexy; presented by Dr. Malcolm.
2. „ 207, Red ramollissement, „ ditto.
3. „ 217, Apoplectic cyst, „ ditto.
- \*4<sup>a</sup>. „ White ramollissement, „ ditto.

## DISEASES OF THE LUNGS.

- 5 & 6. Preps. 212 & 213, Phthisis pulmonalis; presented by Dr. Lynch.
7. „ 214, Apoplexy of the lung; presented by Dr. Malcolm.
- \*8. „ Sanguineous pleuritic effusion, occurring in the practice of Dr. Mateer.
9. „ 215, Pneumonia in its various stages; presented by Dr. Malcolm.

## DISEASES OF THE HEART.

10. Prep. 216, Mitral valve disease; presented by Dr. Malcolm.
11. „ 218, Aortic valve disease, „ ditto.
12. „ 219, Extreme dilatation of the left ventricle, and lesion of aortic valves; presented by Dr. Pirrie.

## MISCELLANEOUS.

13. Prep. 209, Medullary tumour of orbit; presented by Mr. Browne.
14. „ 223, Polypus of the ear; presented by Mr. Browne.
15. „ 210, Polypus of the uterus, presented by Dr. Malcolm.
16. „ 211, Exfoliation of the lower jaw; presented by Mr. Lamont.
17. „ 225, Skull of an idiot; presented by Mr. Browne.
18. „ 224, Synovial lesion, presented by Dr. H. Stewart.
- \*19. „ Cirrhosis of the liver, }
- \*20. „ The brain, in a case of typhus, } Various.
- \*21. „ Stricture of the colon, }

<sup>a</sup> The specimens marked thus (\*) were not preserved.

I.—RECENT APOPLEXY.—The following is the history of this case:—John Little, a robust quay labourer, aged 55, was found by the police one evening lying insensible in the street. He was immediately carried to the General Hospital, in a state of total insensibility. On examination, there was distinct hemiplegia of the right side. Pulse 84, and of moderate strength; respiration stertorous, and iris immovable. He was bled at once, and the vein kept open so long as any blood would come. There was very slight rallying; but he made efforts, apparently, to speak, and evinced other tendencies of returning sensibility. The depletion not having produced any decided result, ten grains of calomel and a turpentine enema were administered, and sinapisms were applied on various parts of the body, to arouse the nervous energy: all without benefit. He sank in sixteen hours; and, on examination, the brain presented the following appearances: an enormous clot was observed occupying the site of the corpus striatum in the *left* lateral ventricle, fully of the size of a ball one inch and a half in diameter. On section it presented coagulated blood to the depth of half an inch, and, deeper, a mixture of medullary matter and fluid blood, clearly evidencing the violence of the sanguineous effusion that must have occurred. The entire ventricle was distended by the unusual pressure; the right ventricle was normal, but the pia mater externally was generally congested.

II.—RED RAMOLLISSEMENT OF THE BRAIN.—Thomas Lundy, aged 42, a nailer, had enjoyed tolerable health until three months before admission into hospital, when he began to complain of a troublesome cough, and soon afterwards of pain in the hepatic region, and, more lately, has been annoyed with a frequent headach and constipation. Precisely three days before admission, he was seized with pain at the elbow-joint and breast, and almost immediately afterwards with paralysis of the *left* arm. Vomiting ensued on the following day, and at 4 o'clock, A. M., on the day of admission, the patient became suddenly insensible, and complete loss of power of the entire of the left side ensued. Sensation remained unaffected; the tongue was coated, and protruded towards the left side; there was inability to close the left eye completely; the chest lesion was simply bronchitic. He was cupped at the nape of the neck, a pill of calomel and ipecacuanha administered every six hours, and mercurial ointment rubbed in. Diarrhœa ensuing, the calomel was soon discontinued. On the fifth day he was seized with convulsions of the right arm and eye-ball, which were soon succeeded by complete hemiplegia of this side likewise. He was now unable to speak or move. The bodily emanations became cadaverous in odour, and on the eighth day he expired.

*Post Mortem Examination.*—The body was examined eight hours after death. On removing the calvarium and the dura mater, general cerebral congestion was observed. There was a slight excess of arachnoid and ventricular effusion. In the centre of the right hemisphere, and about one inch from the lateral surface, there was a distinct



patch of red softening, surrounded by the white form; in all, a space of about two inches square was affected at this point. At the posterior part of the left hemisphere, there was observed a minute spot similarly affected. The liver was large and soft, but otherwise normal; and the lungs and heart were healthy. The stomach and intestines were not examined.

III.—*APOPLECTIC CYST, &c.*—Catherine Dougherty, aged 40, was admitted into the General Hospital on October 2, 1850, with hemiplegia, of three months' duration, of the left side, and with chest symptoms indicative then merely of bronchitis. In two weeks from this date, the state of the lungs became considerably aggravated. Dyspnœa, paroxysms of cough, and bloody expectoration, simultaneously ensued, and shortly afterwards spots of purpura appeared on the feet, legs, and arms. When examined on November 5th, these spots had disappeared, but the hemoptysis continued, attended with distinct signs of pneumonia at the base of the left lung, while the first sound of the heart was clearly roughened and prolonged; and for several days prior to her death, which took place on the 7th, œdema of the paralysed limbs and side was observed. The treatment was altogether palliative, as, owing to the complicated lesions, nothing seemed capable of effecting any but temporary relief.

*Post Mortem Examination.*—Anteriorly, in the right hemisphere of the brain, close to the cleft of the anterior and middle lobes, a distinct cyst, of the size of a large walnut, was seen, filled to distention with a serous fluid of a pale straw-colour. There was some trifling general congestion of the pia mater, but in other respects nothing presented to occasion remark here. In the right lung, several balls of coagulated blood, enclosed, cyst-like, in areolar tissue, were observed in different parts, constituting one of the forms of pulmonary apoplexy, so called. The tissue of this lung was generally healthy. The left lung was pneumonic throughout, the stages of congestion, red hepatization, and minute ulceration, being well marked; there was, besides, extensive pleuritic effusion,—in part fluid and in part coagulated lymph. The mitral valve was thickened, and the orifice contracted; there were no vegetations, and the substance and other parts of the heart were normal; the liver was of the yellow, mottled appearance observable in incipient cirrhosis; the uterus presented externally two fibrous tumours of small size, and a cellular polypus with a pedicle two inches in length, springing from the interior. The remaining viscera were healthy.

IV.—*WHITE RAMOLLISSEMENT OF THE BRAIN.*—This case occurred in the person of James Rogers, a shoemaker, aged forty years, who came over from Glasgow to Belfast on the 6th of July, 1850, to look for employment. He arrived in the morning, drank a little with his acquaintance during the day, and went quietly to his bed about 9 o'clock, P. M. On the following morning, on awaking, he was surprised to find himself without the power of speech, as he had no premonitory symptom whatever. Such was the report of a friend. He was admitted into the General Hospital on the 8th, still dumb,

and unable to protrude the tongue. His expression was stupid and idiotic; the pulse perfectly quiet, and the bowels free. A blister was applied to the nape of the neck, and calomel was administered in minute doses every three hours. On the 10th he attempted to utter some words, but only made a few inarticulate sounds. The gums were this day affected. On the 13th, the pulse was 112, and feeble. Diarrhœa and some imperfect paralysis of the right side were added to his previous symptoms, while his idiotic condition of mind became more and more confirmed. On the 15th, the hemiplegia was complete. A small cupping from the nape of the neck was ordered, and on the following day he regained so much power as to enable him to leave the bed. The improvement was, however, merely temporary. The diarrhœa continued unabated, and on the 17th he expired.

*Post Mortem Examination.*—The brain alone was inspected. Some general cerebral injection existed, as was evidenced by the numerous red points on sections being made; and there was slight effusion in the arachnoid space. But the chief lesion was observed in the middle lobe of the *left* hemisphere, where a portion of the brain, about one cubic inch in size, was distinctly softened, and of a uniform yellowish-white hue, without any unusual vascularity in the contiguous parts of the brain.

V. and VI.—*PHTHISIS PULMONALIS.*—These two specimens were the two lungs of a person who died of pulmonary consumption. They are remarkable as exhibiting considerable hypertrophy, with most extensive infiltration of tubercle as a cause; heavy and solid; they cut like pieces of cheese. A few small cavities were observed in the apex of each.

VII.—This specimen has been already described. See Case III.

VIII.—*PURULENT DEPOSIT IN SPLEEN, AND SANGUINEOUS PLEURITIC EFFUSION.*—John Pirrie, a middle-aged man, was admitted into the General Hospital, having been reported as ill of fever for fourteen days. Iritis set in shortly after, for which he was treated by depletion, blistering, and mercurial salivation. Ten days after admission, hemorrhage from the gums was reported; but, on the thirteenth day, it is stated that the eye had recovered. On the seventeenth day, he was seized with a relapse of fever, in which the usual symptoms were accompanied by diarrhœa, and apparently trifling cough. The bowels were regulated by treatment in two days, yet, on the twentieth, after his supper, and without any symptoms indicative of approaching dissolution, he suddenly expired.

*Post Mortem Examination.*—The body was examined forty-eight hours after death. Both pleural spaces were distended with bloody effusion. Under the left pulmonary pleura there was a distinct extravasation of blood in a coagulated state. In other respects the lungs were healthy, as also were the stomach and intestines. The spleen was much enlarged, and, on section, presented several small but distinct purulent deposits. This lesion, in all likelihood, produced the febrile state reported on the seventeenth day.



IX. and X.—See Case III.

XI.—DISEASE OF AORTIC VALVES.—This dried specimen exhibits thickening of the valves and calcareous deposit, to a remarkable degree, together with partial adhesion, which renders the aperture exceedingly contracted. It was taken from the body of a cavalry officer, who experienced so little annoyance from the disease as to indulge himself, contrary to the express injunctions of his medical attendant, in the exercise of rowing, in which he was engaged at the moment of his death. On a previous occasion he had fallen in a swoon upon the floor of a ball-room, but soon rallied. Further particulars are wanting, though it may be mentioned that the case was seen by several medical gentlemen in Edinburgh, from one of whom the reporter received the interesting specimen.

XII.—DILATED HEART, WITH DISEASE OF AORTIC VALVES.—John Wilson, aged 17, a mill-worker, of lymphatic constitution, was admitted into the General Hospital on the 7th of August, 1850. He never suffered from rheumatism, but occasionally, for the last two winters, has been annoyed with cough, which was so severe last winter as to be accompanied by expectoration of blood. He has latterly complained of palpitation on using more than the most ordinary exertion. On admission, his principal complaints were troublesome cough, and a painful tumour situated at the lower part of the left ham. This tumour, which obliges him to keep the leg closely flexed, was hard and tender, and without pulsation, and its external appearance red and inflamed. After a few days, the tumour completely disappeared, and nothing remained for complaint save the slight cough, which soon also ceased, without any particular treatment. He was now about to leave the hospital, when, at the physician's visit on the 15th, he directed attention to the toes of his left foot, which were exceedingly painful. On examination, the little toe was found to be quite black, while the others, and the dorsum of the foot, presented a mottled appearance. Lesion of the organs of circulation was now suspected, and, on examination, there were discovered extended dulness over the cardiac region, feeble pulse, a distinct murmur with the first sound, increasing in intensity towards the carotids; the pulse was 100, and soft. Opium, stimulants, and nourishing diet were administered; but on the 21st it was evident that a portion of the foot must be lost. The gangrene, however, seemed to have stopped, the sloughs were being detached, and the surfaces underneath began to assume a healthy aspect, when, one evening, while sitting up at his supper, he suddenly expired.

*Post Mortem Examination.*—Unfortunately, the heart and lungs were the only organs examined, so that the condition of the arteries in the left leg cannot be positively declared. The lungs were healthy. The left ventricle of the heart may be seen in the specimen to be extremely dilated, without hypertrophy of the substance of the walls; while the aortic valves are completely covered with small lymphic vegetations, the evident result of chronic inflammation.

XIII.—For an account of this case, the reader is referred to a paper in the last Number of this Journal, by Mr. Browne<sup>a</sup>.

XIV., XV., XVI.—These cases call for no particular remark.

XVII.—This specimen was taken from the body of an adult female, a well-known character, who died in the union workhouse. The malformation of the brain is evident from the examination of the skull, the comparative dimensions of the two hemispheres being altogether different, showing clearly an atrophy of one side.

XVIII.—This specimen represents the first joint of a great toe, of which the synovial membrane is affected with velvety thickening, a beautiful example of one of the phenomena of synovitis.

XIX.—CIRRHOSIS OF THE LIVER.—Alice Lynch, of middle age, was admitted into the General Hospital in a delirious state, and quite unable to give any account of herself. The pulse was imperceptible at the wrist, and there was considerable tenderness of the epigastrium. A stimulant mixture having been administered, she slightly rallied, and the pulse, though very feeble, could be counted 84. The skin and conjunctiva were intensely orange, and the evacuations after enemata perfectly free from bile. The left pupil was dilated. She continued insensible, and moaned on till the close, which occurred on the following morning, after an attack of convulsions.

*Post Mortem Examination.*—The only morbid appearances disclosed on inspection, though all parts of the body were examined, were highly developed cirrhosis of the liver, enlargement of the spleen, and several old adhesions of the uterine appendages.

XX.—THE BRAIN IN TYPHUS.—This case occurred in a male adult. The symptoms were principally cerebral, and the form of delirium, typhomania. The surface of the body was marked with distinct petechiæ, and a rubeoloid eruption. On inspection of the brain, which alone was examined, the substance was uniformly firm. There was general and great congestion, and some bloody effusion was observed in the ventricles.

XXI.—MUCO-ENTERITIS AND STRICTURE OF THE COLON.—Anne Newbold, aged 37, for several years in delicate health, was admitted into the General Hospital on the 20th of April. She stated that she had been subject to spasmodic cough for several years, and was ill of her present complaint twenty-two weeks. It commenced with vomiting and pain of the bowels, which were soon accompanied by debility and emaciation. Six weeks prior to admission, the vomiting ceased, and diarrhœa set in. On admission, there was extreme emaciation; the pulse exceedingly feeble; great prostration; the skin dry; diarrhœa present; the abdomen tender; and a burning sensation complained of at the epigastrium. These symptoms continued unabated until the fatal event, which occurred on the 22nd, and revealed the following condition, on examination forty-eight hours afterwards:—Body extremely attenuated; lungs

<sup>a</sup> Page 226.



healthy; stomach enormously enlarged, extending fully five inches below the umbilicus. The ileum was generally and deeply congested, and the mucous membrane, from its commencement to the cæcum, presented the varied shades of inflammatory vascularity, deepening towards the latter point. The colon was thickened in one point, and also slightly ulcerated; and here the caliber was perceptibly narrowed. The peritoneum was unaffected.

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## MEDICAL MISCELLANY.

*Case of Secondary Hemorrhage, occurring on the fourth Day after Delivery, the Result of the Rupture of a bloody Tumour in the Cervix Uteri.* By GEORGE JOHNSTON, M. D., Assistant Physician to the Lying-in Hospital.

M. H., aged 35, a strong, robust country-woman, was admitted into the Rotundo Lying-in Hospital, late on the night of the 21st September, 1850, labour pains having unexpectedly set in about three hours before. She states that it is her seventh pregnancy, that she has five children living, one having been dead-born at the full period, for which she could assign no cause; had always easy confinements; that, considering herself to be not more than in the eighth month, she had travelled up on foot from the country, a distance of eighty miles, about four or five days previously, for the purpose of arranging pecuniary matters, calculating that she would be able to return home in sufficient time to be confined. During her journey, which occupied upwards of two days, she suffered much from fatigue, and exposure to cold and wet, which, together with her distress of mind, occasioned by the purport of her mission, all tended to bring on premature labour. The foetal heart could not be heard, nor had she felt the motion of the child since her arrival in town. On examination *per vaginam*, the os uteri was found to be about the size of a crown-piece, breech presenting, membranes unruptured, pains apparently not of much strength. However, after a short and easy labour of about four hours' duration, the child was born with the membranes entire; on rupturing them it was discovered to be a female of about eight months, and bore evident signs of having been dead for some time. The placenta was expelled in about ten minutes afterwards; no hemorrhage nor any untoward symptom supervened, and everything went on favourably for the first three days. The milk was secreted on the second day. At the morning visit of the 25th (her fourth day), she expressed herself quite strong; a cough, which she had contracted on her journey, much better; no complaint, nor any uneasiness whatever. At half-past 1, P. M., the nurse called me in a great hurry, stating that the patient had been suddenly attacked with violent hemorrhage. On inquiry I found that she had not been out of bed, nor had she been using any

exertion. On reaching the bed-side (which was in less than a minute after hearing the report, and certainly not more than three from the first gush of blood), I found her lying on her back, countenance perfectly blanched, and expressive of great anxiety, which, with her neck, hands, and arms, was bathed in cold, clammy perspiration. No pulse could be felt at the wrist; and the bed inundated with blood, which was still flowing rapidly from the vagina. The pillows were at once withdrawn from underneath her head, thus placing her completely in the horizontal position; firm pressure was made over the uterus (which was found well contracted); cold applied externally, and a stream of cold water was injected into the vagina and rectum. She was given three ounces of wine, with half a drachm of ergot of rye; at the same time a current of cold air was allowed to pass across her face; all of which had the effect of restraining the great flow, but not of completely checking the hemorrhage, for a slight trickling still continued. However, having restored somewhat the temperature of the body, by means of hot jars to the feet and warm blankets to the extremities, by stimulants (brandy) frequently repeated, beef-tea, &c., we were enabled once more to feel the pulse at the wrist; the colour of the countenance returned slightly, giving us hopes that the worst had been overcome. The ergot was repeated, with forty drops of the acetum opii in an ounce of brandy and water, and pressure was maintained over the uterus by the hand for nearly half an hour. When about re-applying the binder, another sudden flow of blood took place, the hand being still on the uterus, and with it the expulsion of a large coagulum. She again became pulseless and fainted, cold, clammy perspiration once more bedewing the surface of her face, neck, and arms; this was succeeded by extreme restlessness with great anxiety, and the respiration became laboured and gasping. Stimulants were again attempted to be administered, but they were with difficulty swallowed, and shortly after rejected; and she too soon gave evidence that all our efforts were unavailing, as she rapidly sank, just one hour and a half after the first attack of hemorrhage.

*Autopsy.*—The thoracic and abdominal viscera were found quite healthy, but pale and bloodless. The uterus was well contracted down in the pelvis. On closer inspection, just beneath the peritoneal covering, in the left iliac fossa, a tumour of moderately firm consistence was seen, about the size of a large walnut, having an ecchymosed appearance, which extended also some little distance on the outer side: this tumour was firmly attached to the lower part of the uterus. On removing the latter with its appendages, and laying it open from the os to the fundus, cutting in the mesial line through the anterior wall, the muscular structure was found to be quite healthy, and that portion of the inner surface which had been occupied by the placenta was well plugged with a dark and firm clot, portions of which were seen entering the mouths of the uterine sinuses, thus proving that they had not been the source of the hemorrhage. On the left side of the cervix, about one inch from the os uteri, was observed a ragged, sloughy-looking opening, the edges of which were



very irregular, and of a black ash-grey colour. This opening, which was large enough to admit two fingers easily, communicated with a cavity the size of a small orange; it seemed to be formed in the substance of the cervix, and its external wall was found to be the projecting tumour before mentioned, as seen from the outside. On laying open this cavity, and washing away some loose clots (but carefully observing that there were no laminated coagula), the lining membrane was found rugous, of a firm consistence, and resembling very much in appearance the mucous membrane of the vagina. Opening into this sac were seen the mouths of five or six blood-vessels large enough to admit a small bougie. Upon introducing a blowpipe into these open mouths, and inflating them, it was clearly demonstrated that they communicated with the uterine sinuses, for bubbles of air could be driven out of the vessels at the edge of the uterus where we had divided it, and with care and delicate manipulation pieces of bougie could be passed for a distance of nearly three or four inches along these ducts, which ran in various directions, some longitudinally, some transversely, and could even be protruded in one or two instances through their cut openings.

This case was read before the Obstetrical Society on the first night of its meeting this session, when it was considered by some of the members present to be a thrombus or bloody tumour occurring during labour. This opinion, so far, at least, as the former part of it is concerned, has been corroborated by Dr. Carte, the Curator of the College of Surgeons Museum, who was kind enough to make a careful examination of the sac; but at what period the formation of it took place remains doubtful, for it hardly could have occurred during labour, which was extremely easy, as is evidenced both by the short time it occupied, and the manner in which the fœtus was expelled, viz., in the membranes. It is, therefore, a case of peculiar interest, as well as an instance of one of the many casualties the obstetrician is liable to encounter in his course of practice, by which his reputation might be placed at stake and his character deeply involved; distressing, too, from its being almost, if not wholly, beyond his control, and which the vigilance of his most watchful anxiety would be unable to foresee.

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*On the Urine of the Crocodile.* By W. D. MOORE, A. B., M. B.

THE crocodile, from which the specimen of urine I had an opportunity of examining was taken, died on board the Peninsular and Oriental Company's steam-ship, "Ripon," on the voyage from Egypt to Malta. He had been purchased by the Hon. Mr. Murray, Consul-General of Egypt, for the Zoological Gardens, Regent's Park. During the greater part of the four days he was on board, he seemed to be in a state of torpor; once or twice, however, he changed his position, and opened his mouth, but took neither food nor drink. The day before the vessel reached Malta, she encountered a severe storm, with a cold westerly wind; and on her arrival at that port on the 14th March, 1851, the crocodile was found dead in his box. The

box had been placed in the warmest position, and where least motion would be felt; it is probable, however, that he died of the effects of the cold wind which had been experienced on the preceding day.

The crocodile, a male, was nine feet nine inches in length, apparently young, not having lost any teeth. The body was opened about thirty-six hours after death, and examined by F. Godfrey, Esq., superintending surgeon, H. E. I. C., Madras, and my brother, Dr. C. F. Moore, surgeon of the Ripon. No lesion was discovered in any organ; the bladder, which was small, contained about ten ounces of urine, of which a small portion was saved. On the 12th April, thirty days after the death of the animal, I received from my brother a bottle containing somewhat less than two ounces of the urine. I found it to be slightly acid; specific gravity, 1017. On removing the cork, there was a very trifling escape of gas; the odour was very peculiar and disagreeable, almost fæcal, or somewhat resembling sulphuretted hydrogen. There was no evolution of ammonia. The urine was of a greenish colour; it contained a little albumen, and there was a very copious whitish precipitate at the bottom, which my brother informed me existed at the time of its removal from the bladder. The addition of an acid to the fluid portion produced some effervescence. Solution of acetate of lead gave a dirty white precipitate. Solution of chloride of barium produced a copious precipitate. With water of pure ammonia, the urine gave a precipitate of earthy phosphates, which, when examined under the microscope, resembled the appearances figured in Simon's *Animal Chemistry*<sup>a</sup>. No urea could be discovered.

A portion of the deposit from which the urine had been poured off, when digested in water of caustic potash, was quickly dissolved, with the evolution of ammonia; and from the solution thus obtained uric acid was thrown down, as a white precipitate, on the addition of a few drops of dilute hydrochloric acid. Examined under the microscope, the deposit appeared to consist almost entirely of urate of ammonia, in the form represented by Simon, plate 3, fig. 28 *a*.

It is remarkable that the urine preserved its acidity at the end of a month. This was doubtless owing to the absence of urea, as urine which contains much urea becomes alkaline very rapidly, from the formation of carbonate of ammonia. In the absence of urea, and the large amount of uric acid and urates it contained, it resembles the urine of some other reptiles. The existence of albumen is singular, and would lead one to suspect that in opening the bladder a small quantity of some serous fluid might have become mixed with the urine; my brother, however, is not aware of such having occurred. The foregoing examination, although imperfect, may not be uninteresting. The length of time during which the urine was kept, and the fact of its having been taken from a dead animal, may be considered objectionable, as likely to lead to results different from what might have been obtained under more favourable circumstances; but, on the other hand, the specimen seemed to have undergone but little change, and the reptile does not appear to have died of disease.

<sup>a</sup> Sydenham Society's Translation, vol. ii. plate 3, fig. 30 *a*.



*Observations on "the Regurgitating Disease."* By SIR HENRY MARSH,  
Bart., M. R. I. A., &c., &c.

MERRION-SQUARE, April 21, 1851.

SIR,—If you think the letter I herewith send to you of sufficient interest to obtain a place in the pages of the DUBLIN QUARTERLY JOURNAL, I shall feel gratified by its introduction. It was written in haste, in reply to a letter addressed to me by Dr. Little, of Sligo, in which he details the symptoms of a case of "regurgitation," about the nature and treatment of which he felt deeply interested. Dr. Little copied my letter, enclosed me the copy, expressed himself strongly in terms of approbation of its contents, and thought that the interest of the subject rendered it worthy of publication. You can judge for yourself. I will briefly sketch the facts of the case, as stated to me at greater length and with great perspicuity by Dr. Little. This is a necessary introduction to my letter. The patient was a fine, animated, highly intelligent, little girl, of about twelve years of age, precocious in mind, of a very nervous temperament, rather overgrown for her years, and very little, if at all, emaciated. Her aspect was that of perfect health, her pulse regular, respiration perfect. An accurate examination failed to detect anything abnormal in any of the viscera, or to throw light upon the cause or origin of the existing symptoms. There was no spinal distortion or tenderness; the bowels were torpid; evacuations solid, figured, and of a pale yellow colour; the kidney secretion normal; appetite good; tongue clean; scarcely any thirst. During the last six weeks she has been rejecting a part of each meal, sometimes immediately, sometimes in five, ten, or twenty minutes after having been swallowed; sometimes two hours elapse ere the rejection of food takes place. The matters rejected are either unchanged aliment or drink, or, if they remain longer in the stomach, they present the usual appearance of imperfectly digested food. They generally return without smell, or acidity, or bitterness, and without any premonitory or exciting nausea or effort. Wind in the stomach is, however, sometimes complained of, and there are gaseous eructations (sulphuretted hydrogen, I conclude, from the smell and the taste described); and there is a frequent globus, with a hot sensation, in the course of the œsophagus. Her spirits are excellent; she rides on horseback daily, and returns, as it has been expressed to me, "blooming." She had been similarly affected previously. Dr. Little took a perfectly correct view of this peculiar affection, and gave me a summary of the treatment adopted by him, which appeared to me in every particular appropriate and judicious.

I remain, &c., &c.,

H. MARSH.

*To the Editor of the Dublin Quarterly  
Journal of Medical Science.*

P. S.—Within the last two days I have received from Dr. Lynch, of Loughrea, the following case, accompanied by a few observations; I think them well worthy of publication:—

"I saw Miss C—— yesterday, and as it is some time since you had an opportunity of personally examining her, I thought it better to send you a brief outline of her case; you will perceive that it closely resembles the description you have given of regurgitation. I have met with several instances of a nearly similar nature, all in young females.

"Miss C——, aged 20, complains of rejection of food about an hour or two after meals; she feels a sense of oppression at the pit of the stomach, particularly when she indulges her appetite, which is unimpaired; the contents of the stomach are thrown up without effort or nausea. The food, when rejected, smells very acid, and is accompanied by a discharge of frothy mucus; there is occasionally slight pyrosis, with a very distressing sensation of sinking at the epigastrium. There is no tendency to flatulence, no tenderness on pressure over the stomach, and no pain whatever in that region. At first the rejection of food from the stomach was only observed after meals, now it occurs whenever she eats, and no matter what her food may consist of. The contents of the stomach are returned, in successive portions, with little apparent exertion, and in small quantities at a time; thus, after dinner, she is often obliged to retire three or four times within a short period of time, and feels quite well again and in good spirits as soon as the food comes up. She never throws up at night. The menstrual periods are regular, and she is not worse, as regards her stomach, when *unwell* than at other times. There is slight spinal tenderness over the middle dorsal vertebræ, and circumscribed patches of redness frequently occur in the same situation, lasting for a day or two, and then disappearing; this is nothing but mere erythematous redness, without any vesicular, scaly, or pustular eruption. The bowels are habitually constipated; she is not much reduced in appearance, but looks pale, and seems to be in low spirits. Pulse 72, of moderate strength; tongue clean; no headaches, megrim, or noises in the head. Miss C—— has been about three months ill; during the last year or two, she has been exerting herself to the utmost in relieving, as far as circumstances would permit, the misery and destitution which prevailed around her amongst the poor; the consequence was, many harrowing scenes and daily painful appeals to a sensitive and most benevolent disposition. I think that her illness is mainly attributable to this cause. With respect to the treatment, reclining after meals, daily shower baths, regulation of the bowels by aloetic aperients, and horse exercise, have been the means employed. In addition, nitrate of silver in pill, creasote and muriate of morphia in pill, blistering the spine and epigastrium, were had recourse to. The disease lasted for about eighteen months, and then gradually disappeared, while paying a succession of visits to some friends in England.

"Have you tried the extract of calendula or marygold in cases of chronic vomiting? It is highly recommended in the fifth volume of Johnson's Medico-Chirurgical Review, p. 195. I have only once given it as yet, in three-grain doses, but it had not any appreciable



effect. All the cases of this disease I have met with turned out well ultimately, except one, a young lady, about whom I consulted you seven or eight years ago; she died of phthisis. One case was cured by marriage, or rather by pregnancy; the young lady had been affected with the disease for years, and, with the exception of dysmenorrhœa and costive bowels, was in other respects apparently in good health. She has continued perfectly free from the disease ever since her marriage. I could in two cases distinctly trace the disease to a suppressed cutaneous eruption. In one case a combination of calumba and magnesia, twenty grains of the former and five of the latter, was of remarkable use. In another case aqua lauro-cerasi allayed the irritability of the stomach, and tended ultimately to remove it altogether. In one case of very long standing in a very hysterical female, who was a prey to hysteria in a great variety of forms, much relief was obtained by Battley's liquor cinchonæ, fifteen drops three times a day."

"MY DEAR DOCTOR LITTLE.—I am quite gratified by your having written to me. No case could, with more distinctness, exhibit the unmixed characters of this curious gastric affection, than that you have so accurately and fully detailed; it is, in fact, one of the comparatively few uncomplicated forms of the disease we meet with in practice. Since I first called the attention of the profession to the distinction between vomiting and regurgitation, never before, that I am aware of, noticed in print, I have met with it occasionally in its simple form, very frequently associated with other diseases; and I have held it in contemplation to publish additional observations on this interesting, but generally not dangerous affection. The first case which drew my attention to the subject was that of a boy about eleven years old, who appeared in excellent health, yet, without the slightest perception of nausea, brought back after every meal a certain quantity of the food swallowed; enough, however, remained; for the nutritive function was perfect; he was well nourished, and there was full vigour of mind and body. This led me to investigate further. I found regurgitation without nausea to be a prominent symptom in many cases of hysteria; this is its most frequent complication. I found this symptom to prevail in several cases of incipient phthisis in young females of hysterical temperament: a very frequent accompaniment of spinal irritation, either with or without well-marked hysterical symptoms. I found too, that, in several cases of pregnancy, what was called vomiting was, in reality, regurgitation, either without or with only a slight amount of perception of nausea. Also, in many cases of pertussis, I found that the rejection of food after the paroxysm of cough was effected by the act, not of vomiting, but of regurgitation. I was surprised at the number and variety of cases in which regurgitation prevailed: it is, I think, essentially a neural affection. I have met with, at the lowest calculation, twenty cases of it in the female for one in the male. I have often wondered that the distinction, so obvious, and, in a practical

point of view, so important as that between the muscular acts of vomiting and of regurgitation, should not long since have been recognised, and brought publicly before the profession. Regurgitation is a very remarkable irregularity and perverted—I might say reverted—action of the nerves and muscles of the stomach. As far as my observations have reached, I have been enabled to trace it with certainty, in many instances, to the strumous diathesis, to an imperfection of function, connected, I know not how, with struma. In treatment, the knowledge of this fact is valuable. That which, for briefness, may be termed the anti-strumous treatment, is, as a general rule, the most effective. All that is restorative and invigorating in constitutional treatment is best suited to this affection: hence the value of air, exercise, cheerfulness, the thermo-frigid douche to the spine, well-managed tepid shower-baths, sea air, and, above all, travelling, and change of air and clime, and if with a pleasant party, all the better; also, in some cases, particularly those complicated with any degree of chlorosis, preparations of iron. Chlorosis is frequently accompanied by regurgitation without nausea. I remember one most obstinate case, one of long duration, which yielded completely to the use, both external and internal, of the waters of Schwalbach, in Nassau. In cases of an opposite kind, those in which the hemorrhagic rather than chlorotic diathesis prevails, bark or the salts of its alkaloid succeed best. It is a curious fact, which I have noted in many, but not all cases, that the stomach rejecting food perpetually, tolerates and retains even nauseous medicines. Were I again to publish aught on this disease, I should change its title; I should call it “the regurgitating disease:” for since I wrote the paper in the *Dublin Medical Journal* (first series, vol. xxiii., page 237), entitled “regurgitation without nausea,” I have met with many cases of regurgitation *with* nausea. I am now attending an unmarried lady aged 40, hysterical, subject to every variety of nervous disturbance and profuse menorrhagia. She rejects daily a certain portion of her food, unchanged by digestion, morsel after morsel, by the act of regurgitation, not by vomiting. But the peculiarity of her case is, that she suffers from an almost unintermitting nausea: there is no evidence of spinal irritation, nor is there any uterine disease. I have now under my care also another lady, about three or four years older, a martyr, during the greater part of her life, to most distressing spinal irritation, her back scarred with the cicatrices of former innumerable issues, who, though suffering from very constant nausea, regurgitates by little and little a portion of every meal, but does not reject the food by vomiting.

“In two cases of this disease, now under my care, there exists a most remarkable diminution of the renal secretion, with a copious deposit of urate of ammonia. In one of those the appetite is good; in the other it is extinguished.

“In some cases of this singular affection there is present a symptom which indicates the co-existence of dyspepsia. After a meal the patient is conscious of a sense of fulness,—a load, as it is often termed,



—an oppression at the epigastrium. This state continues to be one of great discomfort, until, by successive acts of regurgitation, so much of the meal is rejected as may suffice to relieve this distressing sense of distention. These are the kind of cases in which the symptoms are greatly mitigated by limiting the patient to a certain number of ounces of food at each meal; the amount must, of course, be different in different cases, but the object should be attained of restricting the patient to an easily digestible quantity, so as to take away the necessity for regurgitation; also, in such cases, advantage is derived from enjoining the recumbent position for an hour and a half or two hours after each meal. Curiously enough, I have observed, in several instances, that a patient so affected may dine out and be exempted, during the excitement of a dinner party, from the necessity of disgorging; such is the wonderful influence of mind over nervous action.

“I have observed, too, that this affection of the gastric nerves is sometimes replaced, and I may say cured, by some other form of neural affection. In one case, severe matutinal nervous headaches were substituted for the regurgitation; when the former were established, the latter ceased. In another case (in a patient who ultimately became deranged) regurgitation, intractable and prolonged for months, totally ceased when nervous disturbance and irritation assumed a new form; an hysterical cough, the most loud, roaring, and unearthly in its sounds, dreadful to listeners, not so to the patient, took its place. These facts of substitution elucidate the nature of the complaint. In another very remarkable case, there were, first regurgitation, obstinantly persisting for many months; secondly, on its cessation, total loss of smell and taste; lastly, aphonia, without any indication, local or constitutional, of pulmonary disease. The aphonia persisted for about three months. This lady I sent to travel. Her last letter announced the restoration of voice and of health generally; the nerves of digestion, of odour, of taste, and of voice, have, in succession, resumed their normal functions. In some cases spasmodic cough and other hysteric symptoms co-exist with regurgitation. Subsequent experience has taught me another and a distinct view of this symptom. There are cases of real and often serious gastric disease, in which regurgitation, instead of being the sole or prominent symptom, constitutes only one, and a subordinate one, of a group of symptoms, all indicative of real disease in the stomach and digestive function.

“I have met with cases characterized by severe gastrodynia, pain on pressure at the epigastrium, epigastric pulsation during digestion, gaseous distention and eructations, impaired appetite, and regurgitation, not only of acid or bitter fluids, but also of masses of half-digested food, and other symptoms of serious and even organic disease of the stomach. Cases of this kind are totally distinct from those I have been describing, and there is one peculiarity by which they may generally be discriminated. Real gastric disease is accompanied by a progressive emaciation; in the simple regurgitating

disease, there is either no emaciation, or it is to an extent not sufficient to excite alarm. In one well-marked case of uncomplicated regurgitation in a girl of 16, the mother said:—‘Is it not a wonder, Sir, that my daughter, though she throws up all her food, looks plump, and fat, and well? She is as active and in as high spirits as ever.’ I told her that her daughter was not in danger, that the disease might be tedious, that enough food was retained to nourish her well, that it was purely an affection of the nerves of the stomach. She was in a state of great apprehension about her. In this case the simultaneous application of two, not large, blisters, one at the epigastrium and the other opposite, on the spine, controlled the regurgitation; but it returned after eight or ten days, and yielded ultimately to a course of electro-magnetism. Generally active purgation injures, as, indeed, does every mode of treatment which tends to depress the vital powers. One case, however, in which a vast quantity of faecal matter was detained in the colon, was cured by a course of purgatives. I have found a drop of creasote, with a fifteenth or a twentieth of a grain of muriate of morphia, in pill, repeated three or four times a day, more frequently useful than, perhaps, any other medicine; yet occasionally it happens that creasote disagrees. The compound aloetic pill I have generally found the best aperient. Opium in full doses, while it deadens the irritability of the nerves, injures the whole digestive function; its good is more than counterbalanced by this evil. In some cases prussic acid, either with or without a few drops of the solution of muriate of morphia, has done real good. Slow eating, perfect mastication, food well selected and restricted in quantity, constitute essentials in the treatment. The reception of food slowly, as by suction through a tube, I have found, in a few cases of extreme regurgitation, advantageous. I have thus given ass or cow’s milk, slowly introduced through a straw or glass tube into the stomach, after the American fashion of swallowing sherry cobbler.

“This affection, like hysteria, sets at defiance all fixed rules as to particular remedies; that which perfectly succeeds in one case utterly fails in another apparently identical. In some cases I have known much benefit to be derived from ices; in one case the disease yielded (apparently at least) to iced coffee. I have also found white bismuth and magnesia particularly useful. Of all remedies, I have thought that travelling, and change of air and place constantly repeated, and in obstinate cases a total change of climate, the most uniformly efficient. But I must have done. I have got into the vein for writing, with me a rare propensity. You will pardon the length to which my remarks have been extended.

“Your’s in haste, very faithfully,

“H. MARSH.

“*Dr. Little, Sligo.*”



*History of a Case of Chronic Ulcer of the Stomach, which had existed for many Years, and at length terminated fatally; with an Account of the Post Mortem Appearances.* By ROBERT ADAMS, M.D.; Surgeon to the Richmond Hospital<sup>a</sup>.

MR. H. S., aged 35, a solicitor, had been, since he was twenty-two years of age, more or less an invalid: the symptoms he suffered from were principally referred to the stomach. He was habitually dyspeptic; and each day, after his meals, he became so painfully distended with flatus, that he felt compelled to loosen all his dress. On some occasions he was attacked with paroxysms of gastrodynia, which came on so suddenly and so severely, that he would fall from his chair, and writhe on the floor in agony for some moments. After a time, vomitings, which were remarkable for the very large quantity of fluid discharged on each occasion, attended these painful symptoms. These vomitings were immediately succeeded by painful flatulent distention of the whole abdomen.

The paroxysms very frequently visited him for a fortnight or more, then they would either cease spontaneously, or yield to the treatment used; and, for a time, he would recover somewhat his looks and spirits, and feel himself competent to attend to his active professional business, both in and out of doors.

To prevent the recurrence of the paroxysms above-mentioned, he was treated as we usually treat a patient labouring under aggravated dyspepsia, particularly as to diet. He did not attend strictly to the directions given, and frequently suffered most severely from neglecting the ordinary rules laid down; for example, he on several occasions induced a paroxysm of pain, vomiting, and flatulent distention, by having dined largely on beefsteak, &c., and potato.

His bowels were habitually constipated, and never acted well without the aid of medicine; the urine was very deficient in quantity, and, on many occasions, was found to contain numerous crystals of oxalate of lime. His appetite was variable; but, when he felt quite well, it might be said to be voracious. In 1845, he was advised by Dr. Graves, under whose care he then was, to go to Carlsbad, and he seemed to derive much advantage from his sojourn there, and from drinking the waters. After his return home he enjoyed tolerable health, until early in the summer of 1846, when all his former symptoms recurred with violence, and he again visited Carlsbad, with the hope of getting relief; but in this he was disappointed. While sojourning there, he got an attack of gastro-enteritis, which well nigh proved fatal. He returned to Dublin in September, 1846, and was in a debilitated state for some time; but towards the latter end of that year he again recovered somewhat his strength and spirits, and was permitted to complete an engagement of matrimony

<sup>a</sup> Communicated to the Surgical Society of Ireland, on the 29th Jan. 1851.

which, for two years previously, the mutual friends of both parties had opposed, on account of the uncertain state of his health.

Immediately subsequent to this, the disease was very slow in its progress, and in the years 1847 and 1848 underwent but little change.

In January, 1849, professional business obliged him to proceed to London, and he was recommended to avail himself of this opportunity to consult Drs. Todd and Addison. In my letter to the former, relative to the case, I referred him very much to the patient himself, who was well acquainted with the various means of treatment that had been used. In this letter, however, I particularly mentioned the existence of a small tumour in the right "hypochondriac region," which was painful on pressure. The reply made to me by Dr. Todd, as to the result of his and Dr. Addison's examination, was as follows :

"We are unanimously of opinion that the disease is a *dilated stomach*, from contraction at the pylorus, or immediately below it, in the duodenum. The primary cause was an ulcer, which, cicatrizing, contracted the channel, causing obstruction, dilatation, periodical vomiting, and pain." A system of diet suitable for such a condition of things was recommended.

That the opinion given, that "the stomach was largely dilated," was correct, was plainly to be inferred; first, from the large quantity of fluid vomited at each single effort, as it were, of the stomach; and secondly, because percussion over the region of the stomach gave a peculiar sonoriety, by which we could trace its outline, and estimate the amount of its dilatation. The time to select for eliciting fully, by percussion, this tympanitic distention of the stomach itself, we found to be after the patient had vomited, when the organ became suddenly and largely distended with flatus. In reply to my letter, before mentioned, I find no allusion is made to the tumour which I reported I could sometimes feel in the right hypochondriac region. It is to be supposed that the state of the stomach, during the period of examination in London, was not favourable for the discovery of it; indeed, I have been informed that, during the few days he remained in town, he was much distressed by the over-distended state of his abdomen; and we had observed that the tumour could only be felt when the stomach and abdomen were not distended. However, soon after Mr. S.'s return to Dublin, I again pointed out to himself the tumour situated at the right side; it was firm to the touch, and it was stated that some pain was always experienced after a manual examination had been made.

The unhappy combination, then, of this palpable tumour in the pyloric region, with the physical signs, we may say, of a dilated stomach, rendered the prognosis as to the ultimate result of the case most unfavourable.

I may here remark, that whenever the paroxysms of gastrodynia became so severe as to induce him to require my immediate attendance, I usually found him in bed, lying on his face, his knees



drawn up under his abdomen, and his face on the back of his hands. On these occasions, nothing gave him relief but large doses of some of the preparations of morphia.

For many days after a recovery from one of these paroxysms, if it had been severe, he seemed unable to hold himself erect, but usually kept himself crouched forward, and would even walk through the room thus bent.

To Dr. O. Barker, who was now in constant attendance on Mr. S., I am indebted for the following memoranda:

“ March 30, 1850.

“ During the previous week, Mr. S. has been passing melenous stools ; and on this day a violent hematemesis set in. From these two sources, namely, the black diarrhoea, and vomiting of blood, the patient was greatly exhausted.”

These alarming symptoms, after a week or so, ceased, under the usual treatment hereafter to be mentioned; and although the ordinary vomiting he before had recurred occasionally, he improved in a degree. It is to be remarked, that ever since this attack of melena and hematemesis, he never recovered his looks, but had a pale anemic appearance, which caused his friends to fear that some internal malignant disease existed, and that his death was approaching.

From Dr. Barker's memoranda we learn, that “ on the 22nd of June Mr. S. was put upon nitrate of silver as a tonic, and he took steadily for a month the sixth of a grain three times a day.” He considered that this medicine was of use to him; at all events, the report of his improved condition, after he had been placed under this plan of treatment, runs thus :—“ July 24th. Mr. S. has certainly increased in weight ; he has regained his spirits, and is stronger; he is able to walk out, and take exercise in an open carriage ; he still has occasional attacks of vomiting, and the tumour can be felt as before.” Otherwise, the disease appeared in abeyance until September 25th, when the pain and soreness in the tumour recurred with much severity ; also the frothy vomiting and the flatulent distention, and these, in a few days more, were followed by a second attack of hematemesis and melenous stools, by which the patient was much reduced. Although these symptoms subsided naturally, or yielded to the treatment used, it became necessary now to support his flagging pulse with wine. Claret and Champagne seemed to have a good effect, as diffusible and mild stimulants, and were grateful to him. The pain in the tumour was now very troublesome, and although all appearance of hematemesis had ceased, the daily large vomitings continued ; he was very weak ; and early in November, he was with difficulty moved into town, a distance of four miles.

About midnight, on the 18th of November, he suddenly screamed in an agony of pain; he placed his hands over the hepatic region, and stated that he felt, in the situation where the tumour existed, something drop down, and as if a burst of some kind had occurred internally. I was by his bedside in a few moments; and I saw, by the expression of his countenance, by the general appearance of

intense suffering, and by the inordinate distention and tympanitic state of the whole abdomen, that death was at hand. He had thrown himself on his face, with his limbs drawn up under him; the belly felt more tense than I could imagine possible; his intellect was perfect; his pulse, which at first was tolerably firm, soon became small and frequent, and was scarcely to be counted; his breathing hurried; his extremities cold. Such was his suffering, that his screams could be heard in the next house. His torture could not be relieved by opiates, no matter to what extent given. He survived an hour and a half only after the last sudden seizure of pain, which seemed every moment to increase, until death came to relieve him. During the last hour of his life he seemed to us to become every moment more and more distended, whilst, at the same time, his breathing became shorter and more oppressed. He lay as long as he was able, inclined forwards and somewhat raised, his head supported, until, his strength failing entirely, he fell back and expired.

This last scene gave me the idea that what he had himself a presentiment of, and had often expressed should happen, had now occurred, namely, that "the flatulent distention would one day end in a rupture of some part within the abdomen."

*Post Mortem Examination, made thirty-four Hours after Death.*—The external surface had a very bloodless appearance. The neck and upper part of the body were emphysematous, and the eye-lids greatly swollen, as well as the rest of the face. When pressure was made beneath the clavicles, over the pectoral muscles, an emphysematous crackling became obvious to every one present. The abdomen was as tense as it could possibly be; there was no sign of putrefaction; the limbs were emaciated.

An incision having been made into the cavity of the peritoneum, a rush of air, which was inordinately fetid, took place from the abdomen. When the parietes were fully opened anteriorly, and the flaps thrown down, the stomach appeared of an enormous size, concealing almost all the intestines; it was quite flat and empty, and its outline seemed to exceed four times its natural extent. It was very white, and thickened in its tunics.

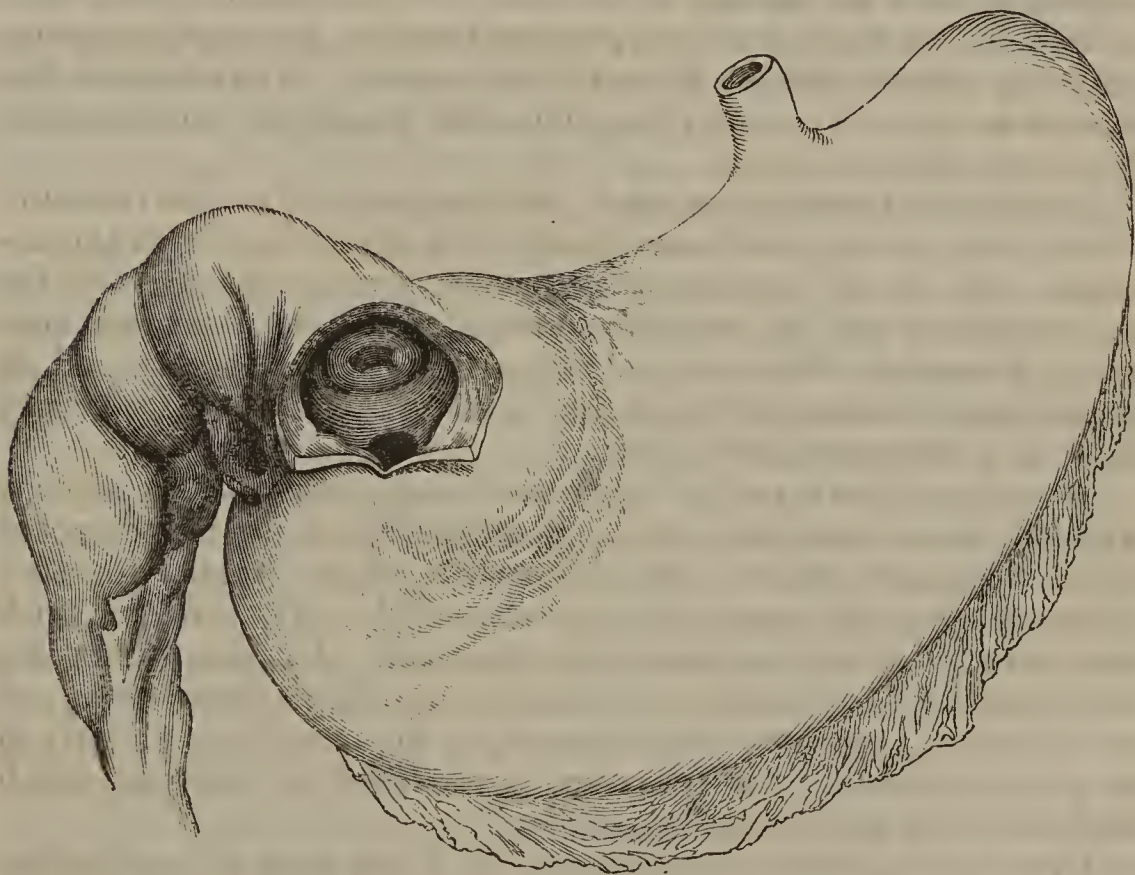
When the pyloric end of the stomach was examined, the tumour adverted to as occupying this region was found to be composed of the thickened parietes of this portion of the organ, together with some enlarged lymphatic glands, which lay behind it; and with these were connected the head of the pancreas. All these structures were found to circumscribe an irregular globular-shaped cavity, or newly-formed antrum, of the stomach, in the immediate vicinity of the pyloric opening; and thus was constituted the tumour which had been so often noticed during life.

Upon pulling down the pyloric end of the stomach, including, of course, the tumour, from the under surface of the right lobe of the liver, where these parts had been not only in contact, but adherent to each other, a large rent, about an inch and a quarter long, running from before backwards, or at right angles to the direction



of the long axis of the stomach, became evident. Through this large slit-like aperture, the edges of which were formed of serous membrane, the contents of the stomach had escaped into the general cavity of the peritoneum. These contents were partly liquid and partly gaseous, and I have no doubt but that an increased secretion of air took place at the moment of, and subsequent to the rupture of the stomach.

The external serous tunic of the stomach seemed somewhat thickened and opaque, as already mentioned. The muscular parietes of the organ were much hypertrophied; large bands, in bundles, crossed transversely and at right angles with the direction of the long axis of the stomach, from the cardia to the pylorus. The mucous membrane seemed to have been thickened, and also hypertrophied; its glands were very large and conspicuous. When the round globular mass or tumour into which the pyloric end of the stomach had been transformed was looked into, it was found to contain a pouch-like cavity or antrum internally. The more consistent part or walls of the tumour seemed to be formed of the much thickened muscular parietes of the organ, which were infiltrated with a dense white tissue, surrounded by enlarged lymphatic glands. This thickened portion of the stomach, and these lymphatic glands, were matted together, and adherent to the head of the pancreas. The portion of the tumour where the rent occurred had been in contact with, and adhe-



rent to, the under surface of the right lobe of the liver, near to the gall-bladder. The giving way of these "salutary adhesions" was the cause of death. When the hollow or interior of the pyloric tumour was fully exposed, it was found that, on its right side, the proper

pyloric aperture, or valve, was seen with a thickened, but not indurated circular margin. This opening was just large enough to admit the index finger, to the first joint. To the left of this antrum was seen the round opening or organic stricture, about an inch in diameter, by which the enormously distended stomach communicated with the antrum I am endeavouring to describe. The mucous lining of this lesser cavity (which formed, as it were, a vestibule to the proper pyloric opening) was removed almost entirely by ulceration; a few shreds of this membrane, and a very thin stratum of muscular fibres, alone remained.

Thus this new pouch, or antrum, had very imperfectly formed parietes, supported on one side by the liver, and behind by the head of the pancreas. Into the interior of this pouch the pylorus projected. The opening of this pyloric ring was somewhat constricted. The food, in the first instance, after having been imperfectly digested for a time in an enormously dilated stomach, had to pass through an organic stricture (as it were) near to the pyloric end of the stomach; secondly, to suffer a remora in the new and badly organized antrum formed in the ulcerated part; and thirdly, to pass through the narrowed pyloric valve, which certainly was not in a normal condition, nor favourable for the transmission of food through it. From this three-fold obstacle, I conclude, arose the difficulty of the transmission of food from the stomach into the duodenum; hence the vomiting, the pain, and the constipation.

The rest of the intestinal tract seemed normal; but a careful dissection of the duodenum showed that its parietes were dilated, thin, and attenuated, and the muscular fibres of this portion of the intestinal tube were in a remarkable state of atrophy. The rest of the organ presented nothing worthy of observation.

Among the many circumstances referred to by the patient's family, as to the supposed *cause* of this disease, we may select, as the most probable, the great irregularity he observed as to the hours of taking his meals. While very young, he became subject to some of the most distressing symptoms of dyspepsia; his appetite was variable, but occasionally *voracious*, and, to use the words of his family, he always "bolted his food." The most remarkable *symptom* in the case was the very severe pain the patient endured. In many cases of chronic ulcer, or even of cancer of the stomach, pain is a symptom not much complained of; yet here, although the patient was a manly, vigorous individual, he was obliged to give way to his sufferings, and, as it had been stated, to fall on the floor in agony, &c. It is not easy to say positively, why these paroxysms of pain should cease for a long interval (the organic cause apparently continuing to be the same), and then so unaccountably recur; but it appeared to me probable that the newly-formed pouch or antrum occasionally became much stretched, when this organ was over-distended with flatus, and that thus the pain might be accounted for. The materials taken into the stomach and imperfectly digested there, no doubt, entered this pouch, and must have encountered a difficulty



in passing out of it through the true pyloric aperture. It would, I say, thus appear to me, that much of the pain the patient endured arose from the temporary remora of undigested matter in this pouch, into which the narrow end of the stomach, near to the pylorus, had been converted. The pyloric end of the stomach appeared to have been nearly detached from the rest of the organ, and the serous tunic seemed alone to connect them, a chronic process of ulceration having removed the mucous membrane in a circular manner; the flatulent distention of the whole stomach, moreover, having a tendency to divaricate the pyloric end of the organ from the rest of it. All this must have occasionally caused an aggravation of the sufferings of the patient, which were always observed to be greater in proportion to the degree of flatulent distention that existed.

Another remarkable symptom to be noticed during the progress of this case was the vomiting. This amounted in quantity to several gallons during the day. One of his immediate relatives, who scarcely ever left his bed-side, assured me that she has on many successive days known the patient to vomit as much as seven large wash-hand basins full of dark, frothy fluid; this, too, being much more in quantity than he could have drank. "Indeed," she added, "I always remarked, on the days he drank the least, he vomited most." The sudden flatulent distention which sometimes occurred was attributable to indigestion, and to the decomposition of materials swallowed, but principally, perhaps, to the secretion of air by the mucous membrane of the stomach; and there can be but little doubt also, that this membrane and its glands were the source of much of the fluid exhaled during these attacks of vomiting.

With respect to the diagnosis, it must have been very difficult to have formed one in the commencement of the disease, because the only symptoms the patient laboured under then were those of aggravated dyspepsia, combined with gastrodynia. When the disease became more advanced, and when it was known that the patient vomited daily such large quantities of fluid, it was to be inferred plainly enough that the stomach was enormously dilated, and that probably a contraction existed at the pylorus. Besides, when the parietes of the abdomen were tolerably flaccid, a round tumour in the situation of the pylorus was plainly to be felt: this tumour was very tender to the touch. When the abdomen was somewhat distended with flatus, percussion over the region of the enormously dilated stomach gave a peculiar sonoriety, by which the gastric region could be clearly indicated, and its extensive outline traced.

Dr. Todd, of London, expressed a wish to examine the fluid ejected from the stomach in this case, and he, having subjected it to the microscope, discovered in it "*sarcinæ ventriculi*," of which he gave me the following account:—"Sarcinæ exist in great numbers in the matters vomited, and so far this confirms my idea that there is a very highly dilated state of the stomach in Mr. S.'s case; for in all other instances where I have found sarcinæ, the stomach was dilated."

When a tumour, as already mentioned, could be felt at the pylorus, and when the vomiting showed that some obstruction existed at this orifice, and when, moreover, the large quantities thrown up, as well as the peculiar stomach sonoriety elicited by percussion, convinced us that the stomach was very much dilated, another conclusion became fairly deducible from all the preceding observations, namely, that the muscular walls of the organ were in a state of hypertrophy.

The melena and hematemesis, as regards the diagnosis, pointed out that ulceration was going on internally; and as to prognosis, that the result would soon be unfavourable; but from the existence of this ill-omened sign of hematemesis, we were not assisted in forming the differential diagnosis, namely, whether the disease was cancerous or not. No doubt, the patient had for a long time the look of one labouring under organic disease, and indeed he had the straw-coloured yellow, the "*jaune pâle*," of cancer, with general anemia: however, I had always expressed my persuasion to the friends, that cancer did not exist. I grounded my opinion on the circumstance that the patient was so young when the disease commenced, and on the length of time the disease had continued, as well as on the fact of the deterioration of health not being uniform and progressive (for the intervals of improved health sometimes lasted even six months), and finally on the great extent of dilatation of the organ plainly recognisable.

Certainly in cancer of the stomach, when vomiting exists, it is usually to a very large amount. I have often heard the late Mr. Colles say, he had generally seen cancer of the pylorus characterized by an unaccountable amount of fluid vomited, this being much more than the quantity swallowed. In this case, however, although the quantity evacuated seemed to the attendants infinitely to exceed that swallowed, I could not consider it one of cancer; because I had never seen cancer of the pylorus accompanied by a dilatation of the stomach, such as was known to exist in this case.

The usual condition of a cancerous stomach does not consist in a state of dilatation and flatulent distention recognizable during life, but in diminished capacity from thickened parietes, and also from fungous growths into the interior of this organ. From the history, and the signs of a chronic ulcer of the stomach, with dilatation and hypertrophy of the muscular tunics, being so well marked, the true nature of the case was by no means an enigma; and the physicians of London and Dublin were respectively agreed in opinion as to the diagnosis and the prognosis.

The cause of death was the sudden rupture of the "*salutary adhesions*" to the liver, and hence the transverse rent with thin edges, noticed in the parietes of the stomach; but when the interior of the organ was exposed, then appeared the circular ulcer, with a deep and sharply cut edge. This ulcer must have taken an annular course round the smaller end of the stomach, within half an inch of the pylorus, thus forming a zone internally which would have a tendency, by becoming deeper, and by the continued ulceration, to de-



tach the pylorus from the rest of the organ ; indeed the serous membrane seemed alone to have held together the pylorus and the small end of the stomach.

Some may here observe, that there was something very unusual in this form of internal ulceration of the mucous membrane running round the interior of the small end of the stomach, instead of occupying, as ulcers usually do, either the anterior or posterior wall of the viscus ; yet, if we look to the work of Cruveilhier, to whom we are much indebted for his description of the chronic ulcer of the stomach, we shall find (plate 5, livraison 10) a somewhat similar ulceration, about one-fourth of an inch broad, running round the mucous membrane of the duodenum, close to the pylorus.

The escape of the gaseous and fluid contents of the stomach is usually owing to the ulcer, causing by perforation a round opening ; but in this case it was caused by a rupture of the salutary adhesions of the stomach to the liver, which last had for a time propped up and supported the parietes of the stomach when weakened by ulceration. Death did not arise from inflammation ; there was not time for this, as the patient only lived one hour and a half after the rupture of the adhesions ; neither was it from collapse or hemorrhage. It would appear to me that the more immediate cause of death was the result of the inordinate extrication of gas from the mucous membrane of the stomach and intestinal canal. This air over-distended all the parietes of the abdomen, and pushed up the diaphragm in such a manner that respiration could not be carried on. In fact, the air was disengaged with such rapidity, and in such a volume, that it made its escape in all directions, retained only by the skin ; penetrating through the different openings in the diaphragm, and ascending the neck, it distended the eye-lids, and infiltrated the areolar membrane in front of the thorax, even beneath the clavicles.

A few hours after death, and long before there was any evidence of putrefaction, the peculiar crackling feel belonging to emphysema was noticed by Dr. Barker, Mr. Williams, and myself. It is singular, that in one of Cruveilhier's cases of death after ulceration of the stomach, *he* also noticed a similar phenomenon ; although, in his case, the emphysema did not appear to be the immediate cause of death.

For the last thirteen years that the patient had been affected with this slow chronic ulceration of the mucous membrane of the stomach, it is not likely that the disease had been uniformly progressive in its course ; on the contrary, we have, I think, good reason to infer that, although the disease always existed ever since its first commencement, still the ulcerative process did now and then stop in its course, if cicatrization did not partially take place ; and we can thus account for the intervals of comparative health he seemed occasionally to enjoy ; such an interval, for example, as that which lasted for so long a period as six months, after his return from Carlsbad.

*Treatment.*—As to the medical treatment, it must be confessed that it was only so far beneficial as occasionally to palliate the sufferings of the patient, and to relieve the pain in the epigastric region,

coming on in paroxysms; for these the treatment was confined to the exhibition of large doses of opium, or of the solution of morphia.

The patient had remarked, that one of his most distressing symptoms was the constipation of the bowels, which almost habitually existed; this he successfully contended against for one year, by having administered to him daily, after his breakfast, a terebinthinate enema, from which proceeding he considered he derived some advantage; and when the bowels were manageable in this way, he thought he suffered less from vomiting. Instead of the enema, he latterly obtained the object in view by taking every day an aperient electuary.

The vomiting, he often thought, gave him relief, and he himself sometimes even mechanically irritated the fauces to induce it. As to the distressing tympany which usually succeeded the evacuation of the contents of the stomach, he derived no relief from the means usually resorted to, such as the aromatic spirit of ammonia, Hoffman's anodyne liquor, camphor mixture, brandy in small doses, &c., &c.

When the hematemesis and melenous stools came on, acetate of lead and opium, with the ordinary mixture of infusion of roses and diluted sulphuric acid, were taken, and subsequently gallic acid; and while he was taking this last medicine, the hemorrhage ceased.

How far this or the nitrate of silver may have been really beneficial to the patient or not, we cannot speak positively; all we know is that he appeared to be temporarily improved while the means were being used to meet the indications which presented themselves.

For the last half-hour of the patient's life, he suffered greatly from a gradually increasing dyspnœa and over-distention of the abdominal parietes,—the result of effusion of air, &c., into the general peritoneal cavity,—produced by the forced elevation of the diaphragm; indeed, it was plain that, from these causes, death by asphyxia was impending, and under such circumstances it might be asked, could not an opening, made through the parietes of the abdomen, have afforded some ease to the sufferer in his last moments? To which I would reply, that there may be some truth in the observation, but that, for my own part, I confess I feel but little reason to regret that I had not actively interfered under the circumstances above stated; for while, on the one hand, I am persuaded such an operation could at best have afforded but momentary relief, on the other, I should have run the risk of bringing surgery into disrepute by any active interference at such a crisis; because, under all the circumstances, a fatal result from rupture of the stomach, which we knew to have occurred, was not only inevitable, but to be almost immediately expected.



*Case of Femoral Aneurism cured by Pressure.* By W. COLLES, F. R. C. S. I., Surgeon to Steevens' Hospital. Reported by Mr. MONTGOMERY.

JOHN SCOTT, an intelligent, healthy-looking man, aged 29, a glass-blower, was admitted into Steevens' Hospital, Jan. 5, 1851, on the recommendation of my friend, Mr. Fleming. He states that, with the exception of an attack of syphilis, for which he was salivated, five years since, he has always enjoyed perfect health; for the last year he has been a teetotaller, but previously to that time he was in the habit of drinking freely; he, however, remarked "that latterly his wind was not as good as others" employed in the same laborious trade. On December 21, after a hard day's work, he felt a tremor in the right leg; he is certain that no tumour or extraordinary pulsation existed there at that time.

On December 23 he first perceived the tumour, after suffering agonizing pain in the thigh and down the limb. Since then the pain continued, attended with numbness of the leg and foot preventing any motion.

On examination, a tumour about two inches long and one and a half broad was felt at the junction of the lower and middle third of the femoral artery. It is soft and compressible, expanding and contracting synchronously with the pulse in the artery. It does not give the definite rounded sensation of a tumour lying over the artery, as is generally perceived in aneurisms in this situation, but seems rather to be a dilatation of the tube itself, which can be traced anteriorly and laterally, gradually expanding, and again gradually contracting to resume its former size. The artery would seem to enter and pass from the centre of the tumour. There is slight œdema, with coldness and numbness of the leg and foot. There does not seem on physical examination to be any abnormal condition of the heart or great vessels, except, perhaps, some tumultuous action of the abdominal aorta. He was admitted into hospital on the 5th January, kept in bed, and subjected to sedative treatment, until the 12th, when pressure was applied by means of Mr. Read's pelvic instrument. As the pain attending the pressure was so severe, requiring the constant change of the position of the pad, and he had not himself that knowledge of the principles of cure which so materially assist the treatment, the pressure was not very steadily or efficaciously applied until the 26th; still during that time it was found that the tumour became smaller and harder as if consolidation were commencing. On the 26th he was removed to a private room, watched more carefully, and pressure more effectually applied by means of two instruments, one Read's pelvic compressor, with Dr. Carte's elastic bands, at the groin, and another circular one lower down. He could himself now command the circulation while changing the instruments, which, from the severe pain caused, required to be done every hour, or sometimes even every half-hour.

The pressure at the groin, however, commanded the circulation more easily, and with much less pain, than that lower down.

February 12, eighteenth day. On loosening the pad the pulsation can be felt at the tumour, which, however, at present is small and hard. He has now become impatient, suffering so much pain, and despairing of a cure by the pressure, that it is with difficulty he can be prevailed upon to continue the treatment. He seems to be in a state of excitement; his arteries, especially the femoral, beating turbulently.

February 17, twenty-third day<sup>a</sup>. The cure is now complete, and he says that he was quite aware of the moment in which the perfect obliteration of the artery occurred. The pressure was continued two days longer, and the limb was kept quiet for a fortnight afterwards, before he was allowed to use it.

I have seen him since, and the tumour is quite hard, about the size of a marble; the artery can be traced pervious to the tumour, but not beyond it.

There are a few points in this case worthy, I think, of remark. First, from the peculiar nature of the tumour it had every appearance of being that form of aneurism described by Breschet as the "fusiform," a dilatation of the entire circumference of the artery at one part of its course, all the coats remaining perfect. This form of aneurism is one which Breschet says is least favourable to the cure by ligature; a form in which we do not often find those layers of fibrine or coagula, which so materially contribute to the consolidation of the tumour, and, therefore, a form of aneurism least likely to terminate without the assistance of art, by the so-called "spontaneous cure." For these reasons, also, it was a form in which the pressure cure did not hold out much prospect of success; so that, although it was resolved to give the pressure a fair trial, yet it was not with any favourable anticipation of so fortunate a result. It is also worthy of remark that in a very short space of time there was an alteration apparent in the tumour, which became harder and smaller after the irregular pressure applied during the first three or four days; yet afterwards, when the pressure was more regular and uniform, the progress towards cure seemed stationary, the artery remaining pervious, and even acting more violently than usual, the day previous to its final obstruction; so that, notwithstanding the progress to cure may seem stationary, yet, if we find at any time any improvement has occurred, or even that the disease has not become worse, it should encourage us to persevere, with a confident expectation that some progress is still going on towards the cure, though it may escape the scrutiny of our senses.

In all the cases I have seen the patient suffered considerable pain; with this man the suffering was, however, more than usual. The pain he very accurately divided into two distinct kinds, one, the

<sup>a</sup> The twenty-third day from the application of the two instruments; the thirty-seventh day from the commencement of the treatment.



pain generally attending aneurism, here aggravated by the pressure both of the instrument and the tumour, and referred to the knee, foot, and leg. This pain is not relieved by time, but generally increases in severity, especially a day or two before the final cure. The pain, with the accompanying œdema and coldness of the leg and foot, can only be relieved by the application of the flannel rollers and attention to the positions of the limb. The other kind of pain was a burning or scalding sensation, limited to the part of the integuments on which the pad pressed, which increased in severity to such an extent as to require the position of the pad to be altered every hour, or even at times every half-hour. The pain, which we must have expected to find, as being so essentially necessary to the preservation of the vitality of the part subject to pressure, may be mitigated by attention to the smoothness or dryness of both surfaces, the dusting the part with absorbing powders, or the interposition of a piece of smooth kid-skin between the pad and the integuments. In a similar case I would suggest the application of a thick coating of collodion, as likely to answer all purposes.

From the peculiar nature of the aneurism, this was a severe trial of the pressure cure; and when we consider its success, and that the average of the number of cases already cured by pressure exceeds the number cured by the operation, I should say we have for the relief of external aneurism a plan of treatment more effectual and less dangerous than the ligature, and that a surgeon is scarcely justified in subjecting his patient to a dangerous operation until he has given the simple, harmless, although painful treatment by pressure a fair and sufficient trial.

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## SELECTIONS FROM BRITISH AND FOREIGN PERIODICALS.

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*Observations on Ozæna and its Treatment.* By M. MAX SIMON.

AUTHORS have justly attributed to various causes the fetid odour imparted, under certain circumstances, to the air, in its passage through the anfractuositities of the nasal fossæ. Sometimes the mucous membrane is the seat of one or more ulcerations, and in some cases these ulcerations are not confined to the mucous membrane, but extend still more deeply; sometimes there is malformation of the nose, either congenital or acquired, opposing the free escape of the nasal mucus; while in other cases nothing is found in the mucous membrane but the signs of a simple chronic inflammation. Can ozæna, taking this term in its etymological sense, exist apart from the conditions which we have just enumerated? This question we propose briefly to consider in the present notice.

The most superficial observation is sufficient to discover that, in the economy, certain secretions become so modified that the liquids of which they are composed exhale an odour more or less fetid, and varying according to the parts in which they are observed. Thus in some, in spite of the most minute attention to cleanliness, the perspiration of the feet exhales a repulsive odour; thus also in some, —and I do not now speak of red-haired people, in whom this occurs normally, —the exhalation from the axilla is, under certain circumstances, extremely offensive; thus, finally, not to prolong this enumeration unnecessarily, some females, at the time of menstruation only, have an insupportably disagreeable breath. In these different examples, the various lesions, the particular local alterations, or the exceptional hygienic conditions, which explain, in a great number of cases, the abnormal phenomenon under consideration, do not exist. To what cause, then, must we refer this fœtor, in the particular conditions which we have supposed. Surely it will not be admitted that in these cases the different secretions with which the fetid effluvia are combined, have been altered or depraved by inflammatory action. Nothing is to be found in the organs eliminating them indicating a lesion of this nature. There is in these several cases a perversion of secretion, not the less real that the manner of its occurrence is unknown, which can only be referred to an inflammatory process by a pure hypothesis that observation refuses to verify. The consideration of these facts has led me to inquire if ozæna does not take place in some cases independently of any local lesion. It is indisputable, in the first place, that ulceration of the nasal mucous membrane, often met with in this disease, whether it be syphilitic or otherwise, is not the cause of ozæna properly so called. This is decidedly proved by the fact, that we not unfrequently meet with patients affected with ozæna in the highest degree, in whom the most attentive examination has failed to discover any such lesion.

MM. Cazenave (of Bordeaux), Trousseau, and Lagneau, have quoted or observed instances in which this was the case. On the other hand, when the lesion is more serious, when the disease, penetrating more deeply, has attacked the nasal bones, when these parts have actually become carious, the odour of caries exists, but does not completely overcome the original fœtor. I believe, with M. Trousseau, that in these cases the fœtor depends on a vitiated secretion, and that it manifests itself independently of the various local lesions with which it co-exists, at least thus far, that it is not produced directly by these lesions.

Now, admitting that ozæna results from an alteration occurring in the secretion of the nasal mucous membrane, must we at the same time admit that this alteration depends invariably on a previous irritation of the membrane? In other words, setting aside cases of specific infection, or of congenital or acquired mechanical alteration of the nasal cavity, is ozæna always, from the very commencement, a chronic coryza? In the first chapter of the interesting memoir on ozæna, published by M. Cazenave, this distinguished physician



incidentally broaches this question. On this point he says:—"The exploration of the nasal fossæ by the ordinary means is so difficult, that it is nearly impossible, in the great majority of cases, to know if the patients who have an offensive odour proceeding from the nose owe it to a faulty conformation of the organ (many people with flattened noses are not afflicted with this disgusting infirmity), to a prolonged retention of the nasal mucus in the sinuses, the spongy bones, or the nasal passages, to ozæna, to caries, or, lastly, to a faulty and constitutional secretion of the olfactory membrane, having some analogy, but in this respect only, with the tainted perspiration from the feet of certain individuals, and the odour peculiar to negroes and red-haired people or to those of very decidedly fair complexion. The difficulty of this exploration constantly baffles both diagnosis and treatment." The writer thus clearly proposes the question that I have just now submitted, but he forgets it in the course of his memoir, where ozæna, when it is not syphilitic or a purely mechanical result, is constantly represented by him as a consequence, or rather as an unusual symptom of chronic coryza. I believe, for my part, that this doctrine, which accounts very well for most cases of ozæna, does not include them all; and that observation discloses a certain number in which ozæna is really caused by an abnormal and constitutionally depraved secretion of the olfactory mucous membrane. Of this the following is an example:

Mdlle. Clem. M., aged fourteen years, whose constitution was rather delicate until about a year ago, when menstruation was established, has exhibited, during many years that she has been under my care, the symptoms of ozæna in a very decided degree. In tracing, so far as I have been enabled to do, the origin of this serious infirmity, I have remarked nothing which could account for it. The nose, examined frequently both externally and internally, exhibited no sign of irritation of the mucous membrane. This membrane is rather pale than congested; it does not show in any of its visible portions the least thickening, much less could the most attentive and frequently repeated examination reveal any trace of ulceration. The secreted mucus does not present in appearance any difference from that observed in non-ozænic individuals; the quantity secreted is most generally inconsiderable; sometimes it is increased, but without any symptom to show that this temporary hyper-secretion is connected with local irritation. By the greatest attention to cleanliness, the intensity of the fetor has been diminished; but, notwithstanding that different means have been successively tried, consisting chiefly in injections of various kinds, the disease obstinately resisted treatment. Although I thought it right to assure her parents, before the menses were established, that it was, in my opinion, useless to try other means, and that we should trust to nature to overcome this serious infirmity,—that it was only necessary to assist her efforts, by keeping the child on nourishing diet, and in a warm and lightsome atmosphere, to counteract the chlorotic state of the skin and the general debility of the constitution,—they thought it prudent

to consult M. Guersant, Sen., who confirmed my opinion, and recommended, in addition, injections with rhatany, salt water baths, and the internal use of iodide of potassium. These means were perseveringly employed, but, I must confess, without much success. Meanwhile Mdlle. M. reached the period at which menstruation became established. Under the influence of this constitutional change, as often happens when no lesion exists to impede the establishment of the function, the whole organism became duly strengthened; Mdlle. M. sprang up, a more plastic blood produced a firmer and better developed muscular system; her figure, hitherto bony, became rotund; her complexion brightened; her skin looked clearer; and at the same time that this transformation, if I may so speak, was going on, the ozæna sensibly diminished, and finally disappeared fifteen or eighteen months after the perfect development of puberty.

M. Cazenave (of Bordeaux), who, as I have already stated, has successfully studied this disease, makes use of an instrument to explore the nasal passages, so as to ascertain whether any ulceration exists which may, according to him, explain the production of the fetid odour. This instrument is a sort of blunt hook, which he moves over the internal surface of the nostrils, and which is caught by the edge of the ulceration when it exists. I confess that neither I nor M. Guersant employed this instrument in the above case, because I am convinced that when a lesion of this kind has long existed, it is impossible that it should not manifest itself by some evidence which was not present in this case. Another reason which prevented me from using this exploration was, that this young lady had long had a blister on her arm, the serum from which exhaled exactly the same odour as that communicated from the nasal fossæ; it was, in some sense, an ozæna of the arm. No one acquainted with this fact, therefore, could doubt that this symptom was constitutional, and had not its origin in a local lesion.

I will make one remark more on this case. The mother of this young girl is likewise affected with a similar infirmity, and, in a great measure, prevents it from being observed by extreme attention to cleanliness. However, there is this difference between her and her daughter, that the nose of the latter is regularly formed, while the mother's is decidedly flat. In such cases, I do not hesitate to explain the ozæna by this vicious conformation, which obstructs the flow of the pituitary mucus, and thus causes it to stagnate and assume a fetid odour. This explanation, however, if not merely specious, would, it will be admitted, be inapplicable in many cases. Thus as MM. Cazenave and Trousseau observe, and as all physicians may likewise have noticed, if we meet flat-nosed people who suffer from ozæna, we meet a much greater number who do not. This mechanical peculiarity, then, is not in itself sufficient to produce the effect under consideration. I know that it may be urged that flat-nosed people affected with ozæna are those who, while they present this deformity, are subject to a superabundant secretion of nasal mu-



cus, while non-ozænic flat-nosed individuals are not. This is an objection which immediately occurs, and which I have no wish to omit; but I am not able to say whether it is supported by observation or not. If experience shall not confirm this remark, which is so far quite hypothetical, the fact I have quoted would have another import besides that I have given it; it would tend to prove that, in some cases, ozæna depends not only on general undefined conditions of the organization, but that it may be transmitted hereditarily along with this peculiarity of organization.

Further, we must not confound a merely transient and unusual odour of the nasal mucus with ozæna. There are individuals who, without any attack of coryza, either acute or chronic, are liable, during a longer or shorter period, to an increased secretion from the nasal membrane. In such cases of hyper-secretion, it sometimes happens that the mucus is characterized by an unusual smell. For example, I am acquainted with a young man who, without any determination of blood to the Schneiderian membrane, occasionally removes with the handkerchief a thick mucus, exhaling a very decided spermatic odour; and a young girl, whom I have also sometimes occasion to see, presents the peculiarity of exhaling, from time to time, from the nose, a truly ozænic odour; and yet, without her paying the least attention to it, or even employing any additional means of cleanliness, this odour disappears. I have not remarked whether there is any coincidence between menstruation and the production of these fetid effluvia: this would be a point worthy of notice.

No one, who has not had the opportunity of proving it, can imagine to what a degree a person affected with a true ozæna infects the air of an apartment in which he has stopped during even a short space of time. M. Trousseau says, that having one day received in his study, for a few minutes only, a young girl afflicted with such an infirmity, he was obliged to let fresh air into the room. I know a poor child who cannot remain in one room for a quarter of an hour, without the people in the apartment being exceedingly inconvenienced. I refer to these facts, to show the necessity of radically remedying, if possible, so disgusting an infirmity, which, in a certain class, obliges those who have the misfortune to suffer from it to withdraw from society.

When the disease is connected with the general state of the constitution, although we cannot exactly say what the nature of this connexion is, we can by topical applications do little more than palliate, and must therefore endeavour to alter the state of the system at large. When, on the contrary, the malady is connected with a local disease, we must undoubtedly have recourse to the modifier, *par excellence*, of diseased tissues, that is to say, to the nitrate of silver. M. Cazenave has brought forward on this subject facts which leave no doubt as to the efficacy of this remedy. It is superfluous to add, that in cases of syphilitic complication, mercury with iodide of potassium must become, according to circumstances, our sheet anchor.

But we must not forget that this malady, whether it be organic or merely functional, is, for those who are affected by it, a serious infirmity, which, if we cannot radically cure, we can at least alleviate. This palliative method of treatment consists in the strictest attention to cleanliness. Patients ought to employ frequent injections of the nose, or, what is perhaps better, they ought frequently to snuff pure water, or an aromatic water, such as distilled rose or jessamine water. They ought, at the same time, to avoid everything which can augment the nasal secretion; for it has been observed, that the more abundant this secretion is, the more decided is the ozænic odour. Sauvages prescribed in such a case the use of tobacco. This remedy might, perhaps, in some cases, beneficially modify or mask the symptoms; but it is to be feared that more frequently, in disguising the odour, it would aggravate the evil. The simple plan has sufficed, in a few cases, to restore to society individuals, especially females, whom this wretched disease had consigned to solitude.—*Bulletin Générale de Therapeutique*, July, 1850.

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*Case of Wound of the Head.* By DR. HORLANCHER.

THE following case is remarkable, not only because it shows that the loss of a certain amount of cerebral matter may take place without exercising any influence on the intellectual functions, but also as a very rare example, in other respects, of injury of the head, which, notwithstanding its apparent gravity, neither gave rise to any reaction, nor in any way disturbed the health of the sufferer.

A boy aged sixteen years, having discharged a gun which had probably been overloaded, it burst, and the screw of the breech entered his forehead and penetrated to a considerable depth. The screw was immediately extracted, and an abundant hemorrhage followed. The wound, which was situated about an inch above the root of the nose, was round, and was about nine lines in diameter. It discharged coagulated blood and cerebral matter. The little finger could easily be introduced to the depth of two inches, so as to touch the substance of the brain. Seven splinters of bone, of various sizes, along with portions of the dura matter, were extracted. During the first fifteen days after the accident, seven other small splinters were discharged, with a great quantity of whitish, cream-like pus. Subsequently, another splinter presented itself between the edges of the wound, but it was so large that it could not be extracted until after the lapse of a month. After that time the wound closed and completely cicatrized. The treatment consisted simply in cold applications, kept up for several weeks, with a light bandage. It is remarkable that the patient, from the time of the accident to the healing of the wound, was free from fever, and did not experience the least alteration in his animal or sensorial functions.—*Il Raccoglitore Medico di Fano*, 31st January, 1851, p. 73.



*On a certain and constant Diagnostic between vital and Post-Mortem Burning, with some Directions for the due Investigation of this Question.* By DR. GIUSEPPE PIRETTI.

HAVING considered the various tests already suggested by science for deciding whether combustion has taken place in the living or the dead body, the author adduces others which are fully established by the facts he brings forward. Accidental or criminal burning, produced in the living body, besides being distinguished from spontaneous combustion and from death by lightning by characters well known to science, may also be diagnosed from that which has taken place in the body after death, by various sufficiently evident external and internal marks. He details such characteristics, and among the external produced by burning in the living body, he remarks the red lines on the skin surrounding the burns, and the blackness of the blood, which demonstrates a change effected in its normal condition by the heat. These lines, he observes, are not removed by the pressure of the finger. The changes he detailed could only, he states, take place under vital influence. He also describes the internal characters, which, according to him, consist in inflammatory and gangrenous spots scattered over the internal surfaces of the serous membranes, especially on those which cover the organs contained in the cavities. These phenomena, he adds, ought to be considered as quite characteristic of criminal or accidental burning, because they are never present where combustion has taken place in the dead body; and he asserts that, even if all the external signs enumerated by him be thought insufficient to establish the distinction, the internal inflammatory or gangrenous marks certainly cannot mislead; and that therefore he is entitled to conclude that the objections of those who hold these signs to be doubtful and insufficient to solve this important medico-legal question are untenable.—*Il Raccoglitore Medico di Fano*, 15th January, 1851, p. 35.

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